State of India's Population

Population Foundation of India
New Delhi

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ABOUT THE FOUNDATION

The Population Foundation of India (formerly known as the Family Planning Foundation) came into being in 1970 and has ever since been in the forefront of non-governmental efforts to check the runaway growth of the population of the country and establish a balance between resource, environment and population.

The Foundation was established by a dedicated group industrialists and population activists led by Bharat Ratna, the late Mr JRD Tata who guided it as the Founder Chairman until his death in 1993. At present Dr Bharat Ram, eminent industrialist, is the Chairman and Dr K. Srinivasan, well known Demographer, is the Executive Director.

The Founding Fathers believed that a movement of social development such as family planning should not and cannot remain the sole concern of the government and it ought to be supported and supplemented by private voluntary enterprises. The Foundation has, therefore, always worked in close co-operation and coordination with official agencies and programmes. In its independent role, it has tried to guide and influence the national population policy and to serve as a catalytic agent to promote programmes at different levels directed towards the ultimate goal of population stab

CONTENTS

		Page No.
	Foreword	(i)
1.	Human Development Index	1
2.	Gender Related Health Index	4
3.	Reproductive Health Index	6
4.	Population	8
5.	Fertility	11
6.	Mortality	13
7.	Educational Level	16
	Annexure	19
	Tables	25 – 36

LIST OF TABLES

Table 1	:	Human Development Index (HDI) : India & Major States 1995	25
Table 2	:	Gender related Health Index (GHI) : India and Major States 1995	26
Table 3	:	Reproductive Health Index (RHI) : India and Major States 1995	27
Table 4	:	Population Size in 1951, 1991, 1998 and 2016 and Index of Increase, India and Major States	28
Table 5	:	Change in Crude Birth Rate (CBR), Crude Death Rate (CDR) and Natural Growth Rate (NGR), India and Major States	29
Table 6	:	Decline in Total Fertility Rate (TFR) — India and Major States	30
Table 7	:	Decline in Infant Mortality Rate — India and Major States	31
Table 8	:	Infant Mortality, Components of Infant Mortality and under 5 Mortality, q(5), 1995, India and Major States	32
Table 9	:	Selected Educational Statistics, India and Major States	33
Table 10	:	Profile of Human Development — India and Major States, 1991	34
Table 11	:	Expenditure (Rs.Lakhs) on Health, Family Welfare, Water Supply & Sanitation, Nutrition and Education, 1995-96, India and Major States	35
Table12	:	Percentage of Couples Currently & Effectively Protected by Contraceptive Methods as on 31-3-1996, India and Major States.	36

FOREWORD

Population Foundation of India developed and computed, in 1996, three indices of health and development viz. Human Development Index (HDI), Gender related Health Index (GHI) and Reproductive Health Index (RHI), based on the most recent data available at that time.

The Human Development Index (HDI) computed for the major States in India was similar to the one developed by the United Nations and was based on data available around 1993. It is a composite index combining the values of three component indices on expectation of life at birth, educational attainment and state domestic product. The difference from the UN Index is that the 'educational attainment' was measured by a combination adult literacy rate and middle school enrolment ratio weighted in 2:1, rather than school enrolment rates at primary, middle and secondary levels combined with equal weight in the UN Index.

The second index, Gender related Health Index (GHI) is a simple average of three component indices which measure the male-female gap in education, infant mortality and expectation of life at birth.

The third index Reproductive Health Index (RHI) takes into account the seven factors of total fertility rate, infant mortality rate, life expectancy at birth, educational level, type of medical attention at birth, birth order and birth interval, first converted into indices and then combined with equal weights. All the indices are in the scale of 0 to 100, 100 indicating the highest possible development.

The computed values of these three indices at the state level, with data available for 1993, were published by the Foundation in the form of a 'Wall Chart' entitled "India : Population, Reproductive Health & Human Development". The Wall Chart became quite popular and was in good demand by many programme personnel, academic institutions and individual scholars engaged in population, reproductive health and family planning programmes or research activities.

Encouraged by the responses to the Wall Chart, the Population Foundation of India has decided to publish every year a booklet entitled "State of India's Population" presenting most recent information on the levels of fertility, mortality and reproductive health and combining them into indices of HDI, GHI and RHI. This will facilitate quick and easy assessment of changes in these indices and their component values across the states and over time. The present volume is an attempt in this direction. In the computation of indices for the present volume some minor changes have been introduced from the last one, necessitated by paucity and reliability of data. These have been explained in the body of the text.

Mr K S Natarajan, Joint Director (Monitoring & Evaluation) in the Foundation undertook the major responsibility in compiling the required data and making the computations. In the compilation, analysis and presentation of this report, he was assisted by Dr. Sanjay Kumar, Programme Officer and Mr G.V. Ramachandran, Jr. Consultant. The 'State of the India's Population' is accompanied by a 'Wall Chart' containing the three index values at the State level as well as certain other essential population data, in the most recent period, circa 1995.

I hope the 'State of India's Population' as well as the 'Wall Chart' would be useful for programme administrators, policy makers and research personnel as a ready source of information on population relevant issues. Any comments and suggestions for further improvement are welcome.

Dr K. Srinivasan
Executive Director
Population Foundation of India

June 29, 1998

1. Human Development Index

In recent years the realisation has grown that people are the real wealth of a nation. Progress of a country is measured not only in terms of income expansion and commodity production but also in terms of expansion of human capabilities. Even though countries with higher average income tend to have higher life expectancies, lower Infant mortality rates and higher literacy rates, these associations are far from perfect. Intercountry comparisons of income variations tend to explain less than half the variations in life expectancy or infant mortality rate. This does not mean that economic growth is not essential for improving quality of life. How the different segments of the population share the fruits of economic growth are equally important to consider. In particular what the poor get-and how much additional resources are used to support public services such as primary health care and basic education are important to consider.

The Human Development Reports of the UN in recent years are efforts to focus on the developments in raising human capabilities in addition to income. The first report in 1990 introduced a new way of measuring human development - by combining indices of life expectancy, educational attainment and income into a composite human development Index (HDI). Since no single index can capture all facts of human development, this index is being reviewed constantly. Gender Related Development Index (GDI) which focuses attention on gender disparities in development is another index added to HDI.

The HDI index is available for India from the UN reports. Data similar to those used in HDI by UNDP are available for 16 major states of India. Using the 1993 data, Population foundation of India had worked out HDI for the 16 states of India. The present report bases the index on the latest data available for year 1995.This income variable used in the index at state level is the State Domestic Product (SDP) which is in terms of Purchasing Power Parity (PPP$). This is further adjusted for diminishing utility of higher levels of income in human development. This is based on the fact that beyond the limit the income increase does not have same utility.

The HDI 1995 in this report has been computed at the state level by giving equal weights to three component indexes namely

1. expectation of life at birth, for the period 1991–95;
2. educational attainment of the population based on enrolment ratios in middle school during 1995 and estimated adult literacy rate (for ages 15+) for year 1995, extrapolated from 1971, 81 & 91 census data; and
3. the purchasing power parity price (PPP$) adjusted per capita SDP for 1995.

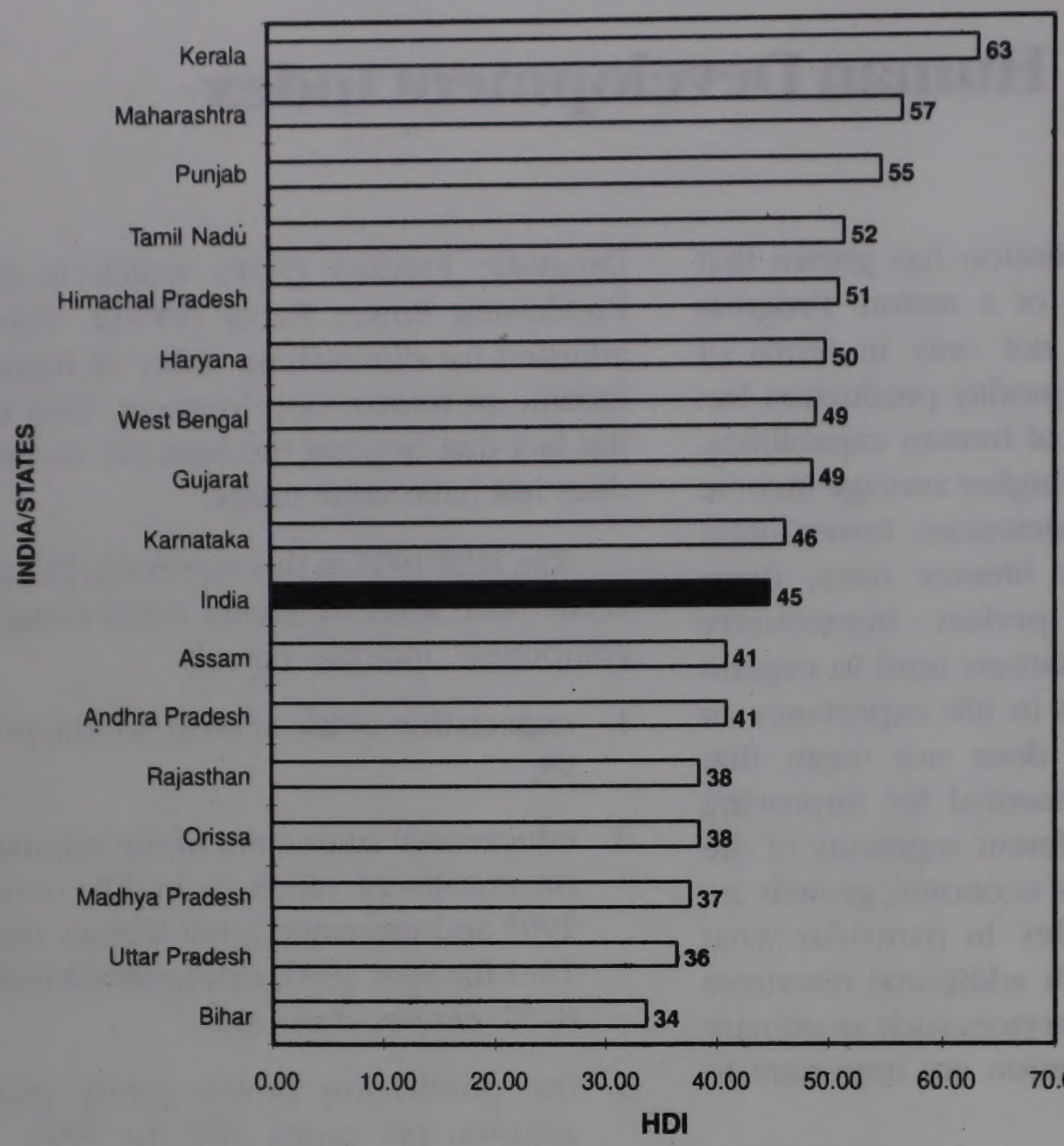
The procedure is same as adopted by U.N. except that only middle school enrolment is used instead of weighing primary, middle and tertiary level enrolment ratio as in the UN Index. This change is keeping in view the reliability of data made available for India. The detailed data on each of the variables and indices at the state level and sources are furnished in table-1. Computation procedures are explained in Annexure.

The HDI for India by this method works out to 45 close to 44.6 reported for year 1994 by U.N. Human Development Report-1997.

On the basis of the human development index, U.N. has classified countries into those with high, medium and low human development countries. Under this scheme the high human development states would consist of those with HDI of 80 or above. Medium with HDI of 50 to 80 and low with HDI below 50. India with an index of 45 falls in category of low HDI. Within India, there is a vast variation

Chart 1

HUMAN DEVELOPMENT INDEX, 1995



BALANCE SHEET OF HUMAN DEVELOPMENT

between states. Kerala with a HDI of 63 is far ahead of other states. Haryana, Himachal Pradesh. Kerala, Maharashtra, Punjab and Tamil Nadu would qualify to be classified as medium Human Development states. Together, about one fourth of Indian population lives in these six states. All the other major states would fall under the low human development category. The states of Bihar, Madhya Pradesh. Orissa, Rajasthan & Uttar Pradesh. which together constitute 45% of India's population, have, HDI of less than 40.

Ranking by HDI does not always match ranking by per capita income. Of 16 states of India, their ranking by HDI is better than ranking by State Domestic Product in Assam, Himachal Pradesh, Kerala, Orissa, Tamil Nadu & West Bengal. In respect of Bihar, Uttar Pradesh., Maharashtra, the ranking remains the same by both the indices. Andhra Pradesh., Gujarat, Haryana, Karnataka, Madhya Pradesh, Punjab & Rajasthan have a much poorer ranking by HDI compared to their SDP. Kerala is a typical case of significantly higher human development at lower income. On the other hand states like Punjab & Gujarat have higher per capita SDP but lower HDI. A graphic presentation of states by their 1995 HDI values is given in chart 1.

1. Expectation of Life at Birth

At the time of Independence, expectation of life at birth for the country as a whole was around 32 years. This has increased to 60.3 years during 1991-95. The figures for males and females were 59.7 and 60.9 respectively. The corresponding figures during 1941-51, centred around 1946 were 32.5 and 31.7 years.

2. Infant mortality

At the time of Independence the infant mortality was estimated to be around 180 per 1000 live births. This has decreased by more than half to 74 in 1995.

3. Education

The percentage of literate population aged 5 and above has increased from 18.3 in 1951 to 52.2 in 1991. The corresponding figures for males and females were 27.2 and 8.9 in 1951 and 64.7 and 39.2 in 1991.

4. School Enrolment

Number of children enrolled in primary school has increased from 18.7 million in 1951 to more than 110 million in 1995. The corresponding figures for males and females are 13.8 million and 62.4 million for males and 4.9 million and 47.9 million for females. Rapid increase is noticed in female enrolment. At the middle school level Grade VI to Grade VIII, the change was more phenomenal for girls; the figures being 0.53 million and 18.7 million in 1951 and 1995 respectively. For boys the corresponding figures were only 2.6 million and 26.5 million.

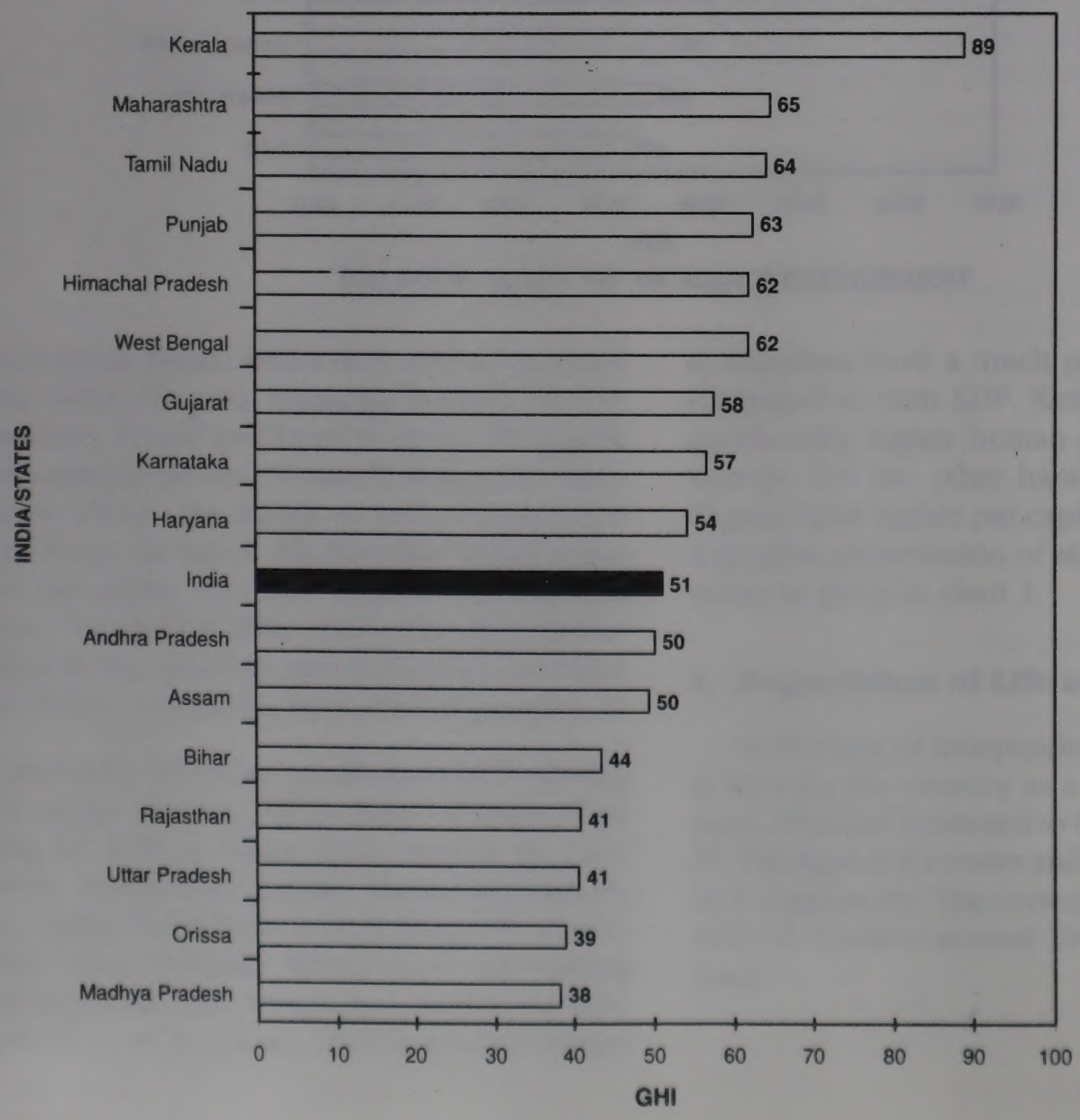
2. Gender Related Health Index

The GHI uses the same variables as HDI and attempts to capture the achievements in narrowing gender differentials through the same set of basic capabilities included in HDI, such as life expectancy, educational attainment and income. However the Gender related development index (GDI) of the UNDP adjusts the average achievement of each state in these parameters such as life expectancy at birth, educational attainment and income for the disparities in achievement for males and females. Such adjusted indices are termed 'equally distributed indices'. If these parameters are same for males and females GDI would be same as HDI. If there is a gap between males and females in the achievements, then the average is reduced.

While the UNDP's index uses distribution of income between males and females as one of the parameters, in view of the difficulty in getting reliable data on sexwise distribution of SDP, at disaggragated level, this has been omitted from the index constructed here for the states of India. Since

Chart 2

GENDER HEALTH INDEX – 1995



this index uses health and educational related indices, it is termed as Gender Related Health Index (GHI) instead of GDI. While in the GDI constructed by UNDP, educational attainment is used as a measure of development efforts, in GHI, this is viewed as a proxy for positive health. The index has been constructed for males and females and a weighted average used. The weight is such that if the Gender equality is higher, the index is higher. If there is gross discrimination against any sex, then the index will be lower. The index is measured in a scale of 0 to 100. Table 2 presents the index and the sources of data.

There is considerable variation between states of India. Kerala leads with a GHI of 89. Madhya Pradesh & Orissa with indices of 38 & 39 are at the low end. The low position of these two states is due to the high Infant mortality rate values in the range of 100. Bihar, Rajasthan & Uttar Pradesh. also have low GHI values of 44, 41 & 41 respectively. Himachal Pradesh, Mahashtra, Punjab, Tamil Nadu and West Bengal have higher indices though these states are still far behind Kerala. Gujarat & Karnataka have similar values, with Haryana following closely. Andhra Pradesh & Assam have indices of 50. A graphic presentation of GHI values at the state level is presented in Chart 2.

Analysing the individual components of the index we find that the equally distributed index of e_0^0 varies from 79.1 in Kerala to 49.4 in Madhya Pradesh giving a range of 29.7. The index of Infant mortality rate varies from 94.0 in Kerala to 18.6 in Orissa, a variation of 75.4 points. The index of education also varies sharply between states, the range being 63.2 (92.7-29.5). Thus the variations in infant mortality & educational levels seems to be major contributors for the variation between states. If the gaps infant mortality rates and educational levels are reduced, the variation in GHI would reduce sharply. Both of these factors would require investments in social sectors.

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3. Reproductive Health Index

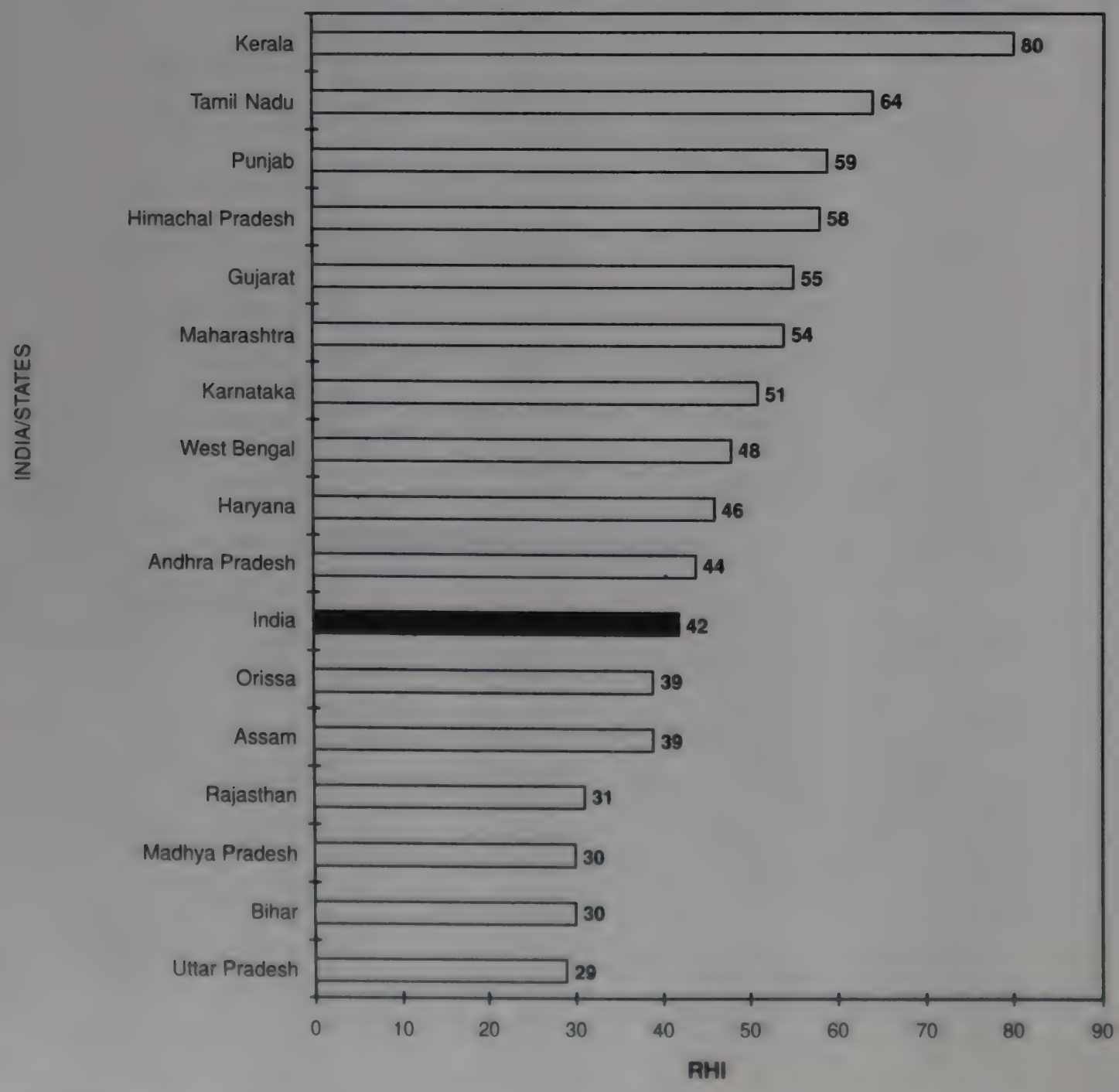
'Reproductive Health is a state of complete physical, mental and social being and not merely the absence of disease or infirmities in all matters relating to the reproductive system and to its functions and processes'

— W.H.O.

Reproductive Health is a crucial part of general health and is central to human development. According to above definition, reproductive health implies that people have the capability to reproduce and the freedom to decide if, when and how often to do. Implicit in the above is the access to appropriate health care services that will enable woman to go through pregnancy and child birth safely and provide the couple with the best chance of having a healthy infant.

Chart 3

REPRODUCTIVE HEALTH INDEX – 1995



To measure the status of various states of India on reproductive health, an index has been constructed based on reliable data available annually. After examining available data, the following seven parameters have been identified to measure reproductive health. These are

i. Total Fertility Rate (TFR),

ii. Age specific fertility rate in the age group 15–19 (ASFR 15-19), to represent teen age fertility,

iii. The proportion of higher order births i.e. order 4 and above (B4+),

iv. Percentage couples effectively protected by contraceptives (sterilisation),

v. Perinatal mortality rate (PNMR),

vi. Proportion of births receiving skilled attention (SKAB) at the time of delivery and

vii. Educational attainment of women (EAW).

While the first one relates to the total burden of child bearing, the second variable ASFR 15–19 gives an idea of the extent of fertility in the teen ages. High fertility in this age group is a contributory factor for higher maternal and Infant mortality. The next two measures reflect extent and impact of contraception i.e. the ability to decide on control of fertility. PNMR and SKAB measure the extent and impact of the quality of delivery services. Lower PNMR is known to be due to better physical and mental health of mother during pregnancy and delivery. The seventh variable education is recognised to have direct influence on the women's ability to access and utilise the health care facilities for herself and her family. There are a number of other factors such as childlessness, female mortality and maternal mortality which one would like to include in the index. Unfortunately reliable data on these items are not available on a regular basis.

Based on above seven parameters Reproductive Health Index (RHI) has been computed. Table 3 gives the data, the indices for components and the composite RHI. These indices are on a scale 0 to 100. The RHI is highest for Kerala and lowest for Uttar Pradesh, followed closely by Bihar and Rajasthan. A graphic presentation of the states based on the RHI values is given in chart 3.

Based on the component indices of the RHI, Uttar Pradesh ranks lowest in TFR Contraceptive protection rate due to sterilisation and birth order. Bihar ranks lowest in index of educational attainment. Rajasthan is seen to have the lowest index of skilled medical attention at delivery. Very high perinatal mortality rate in Orissa is a reflection of the lower nutritional status and ANC facilities in that state. Very high age specific fertility rate (15–19) in Andhra Pradesh results in low index of teen age pregnancies for that state. On the other hand very high index based on ASFR (15–19) for Punjab is a reflection of the relatively higher age at marriage and low fertility of women in the age group 15–19 in Punjab probably due to better contraceptives. Kerala though ranks first among the states in over all index, ranks way behind Punjab in ASFR 15–19 index.

4. Population

Population size and past growth

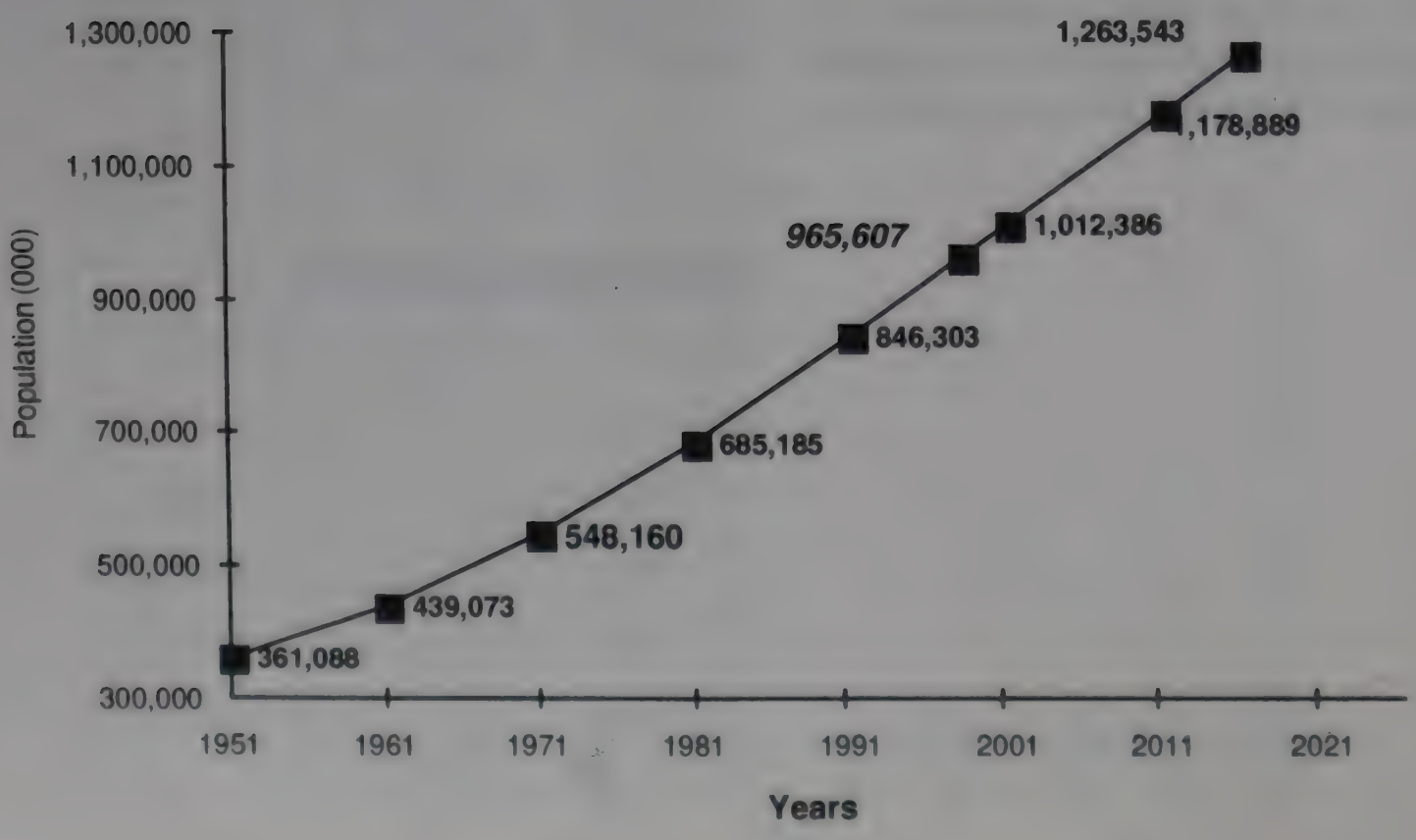
The population of India has been estimated at 970.9 million as on 1st July 1998 showing an increase of more than 124 million since the last census conducted in 1991. In 1947, when India attained Independence, the population of India was around 342 million. Since then, 639 million have been added to the population of India. In the last 20 years, alone another 342 million have been added to the population of India. As per the estimates of Sample Registration System of the office of the Registrar General of India, the population of India is increasing at present at a rate of 17 million per year. In other words, the last 100 million has been added in less than six years. It may be recalled that before Independence, it took 42 years to add 100 million. Since 1951, when the first Census in independent India was conducted, about 600 million have been added to the population of India. The first 100 million was added in 12.5 years, the second 100 million in 9.3 years, the third 100 million in 7.6 years, the fourth 100 million in 6.4 years, the fifth and sixth 100 million in 5.8 years. Since 1951, when the first Census of Independent India was conducted the population of India has multiplied by 267%. The increase has been the highest in Assam (318%), Haryana (329%), Rajasthan (324%) and least in Tamil Nadu (202%).

Projected Population

It has been estimated by the Technical Working Group on Population Projections appointed by Planning Commission that by 2016 India's population would go up to 1263 million (Chart 4) i.e. by another 31%. While the population of states of Kerala, orissa and Tamil Nadu will increase by 15% to 19% during 1998-2016, that of states of Bihar, Madhya Pradesh, Rajasthan and Uttar Pradesh would increase by over 40%, the highest anticipated

Chart 4

POPULATION OF INDIA, 1951–2016



increase being in Uttar Pradesh with 55%. UP's population will cross a mind boggling figure of 242.8 million by 2016. (See Table - 4).

Urbanisation

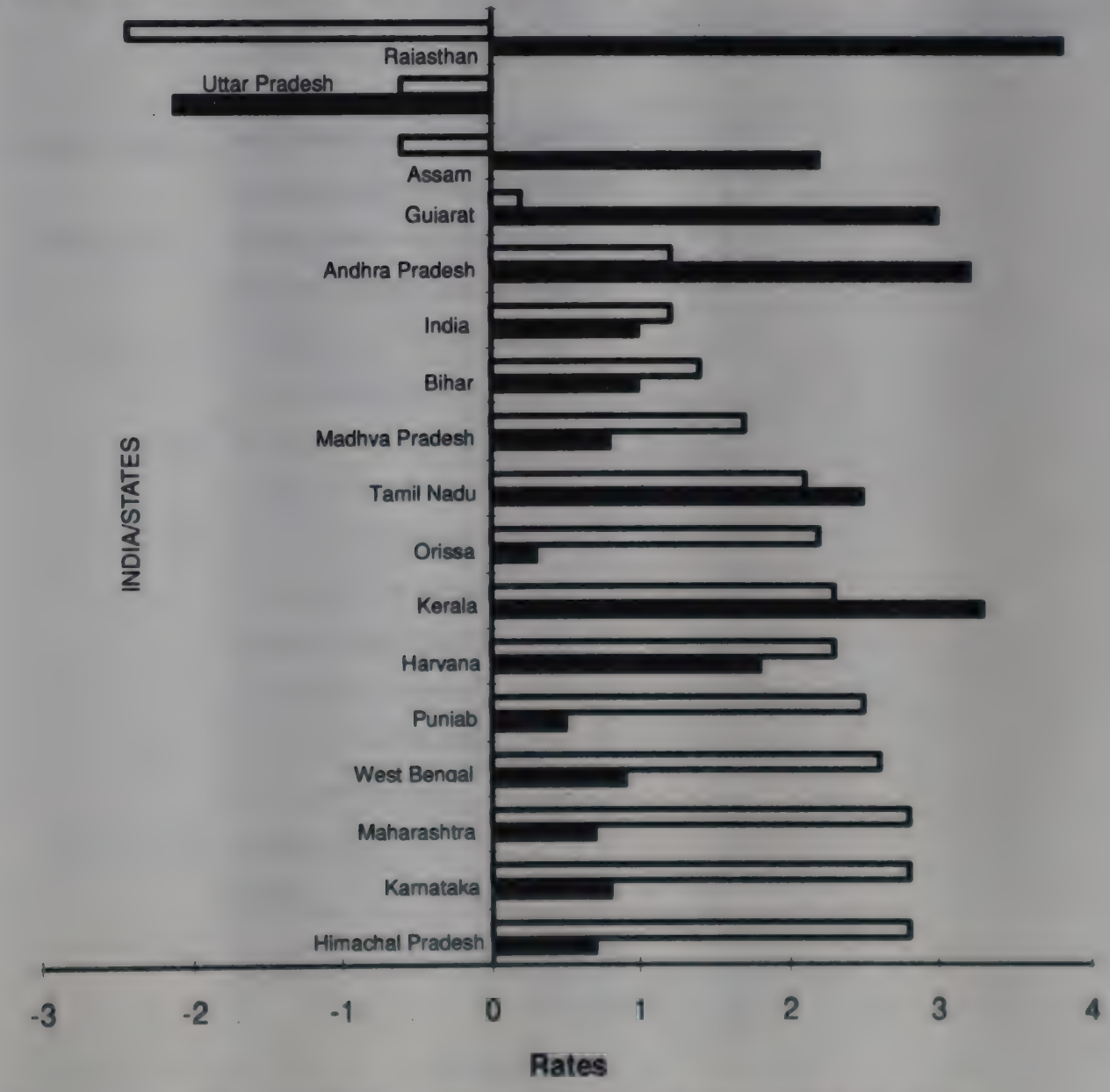
The urban population of India has been estimated at 268.8 million as on Ist March, 1998. The 1991 census figure was 217.2 million. It has been projected to increase to 425 million in 2016, or an increase of 208 million during a period of 25 years 1991-2016. In other words the urban population would almost double in 25 years. The annual addition to urban population would be around 8.05 million. This would put a severe constraint on infrastructure facilities such as housing, water supply, sanitation and transportation. Around 2/3 of this urban population lived in about 132 class I cities with population of 1,00,000 and above in 1991.Further majority of the population of class I cities live in 23 million plus cities. In these cities the pressure of population would be mounting.

Birth Rate, Death Rate and Rate of Natural Increase

Births, deaths, immigration and emigration are the four components of population change. The excess of births over deaths, called natural increase is an important measure in understanding population change over time. The simplest and most common measure of natality of a population is the Crude Birth Rate which is expressed as the ratio of annual number of births per 1000 mid year population. It is an important component to study the population change but is not very accurate if one wants to study the various components of process of change. As the name itself indicates, it is a crude measure affected by the age, sex, marital status distribution of the population as also the fertility rates of married

Chart 5

CHANGE IN THE RATE OF NATURAL INCREASE



population. The difference between crude birth and crude death rate determines the natural growth rate of the population.

The India both CBR and CDR have been declining. While CBR declined by 2.3 points (from 30.8 to 28.5) between 1988-90 and 1993-95, the decline was less compared to previous 5 years both in absolute and relative terms (see Table 5). Barring Rajasthan, in all other states, CBR has declined during the last quinquennium. In Andra Pradesh, Assam, Bihar, Gujarat, Kerala, Tamil Nadu and Uttar Pradesh though CBR has declined, the decline in the recent period seems smaller than that of the previous quinquennium both in absolute and relative terms. Even though CBR has declined less in Kerala and Tamil Nadu, this is to be expected as these states have already reached replacement fertility. In Haryana, Himachal Pradesh, Karnataka, Madhya Pradesh, Maharashtra, Orissa, Punjab and West Bengal, the CBR has declined faster during the quinquennium.

In Rajasthan CBR has remained constant, but CDR has declined faster during the decade resulting in an increase in natural growth rate during the recent quinquennium from 22.3 to 24.7. Of the other five states namely Andhra Pradesh, Bihar, Assam, Gujarat and Uttar Pradesh where CBR decline has lost its momentum, in Assam and Uttar Pradesh the decline in birth rate is less than the decline in death rate. As a result the rate of natural increase has gone up. In the other three states, the birth rate decline though smaller than previous five years, has been more than decline in death rate, resulting in decline in natural increase rate. Chart 5 presents the change in rate natural increase in the recent five years (1988-90 over 1993-95) and the previous five years (1983-85 over 1988-90). A positive sign indicates decrease in NGR while a negative sign indicates increase in NGR. In Assam, Rajasthan and Uttar Pradesh NGR has increased in last 5years. In Uttar Pradesh the increase was noticed in previous five years also.

Of the remaining eight states where decline in birth rate has accelerated during the recent quinquennium, the rate of natural increase is falling rapidly. Madhya Pradesh, long classified as a BIMARU state seems to be reducing its rate of natural increase. Whether it will continue its decline in the future needs to be watched.

5. Fertility

Total Fertility Rate (TFR)

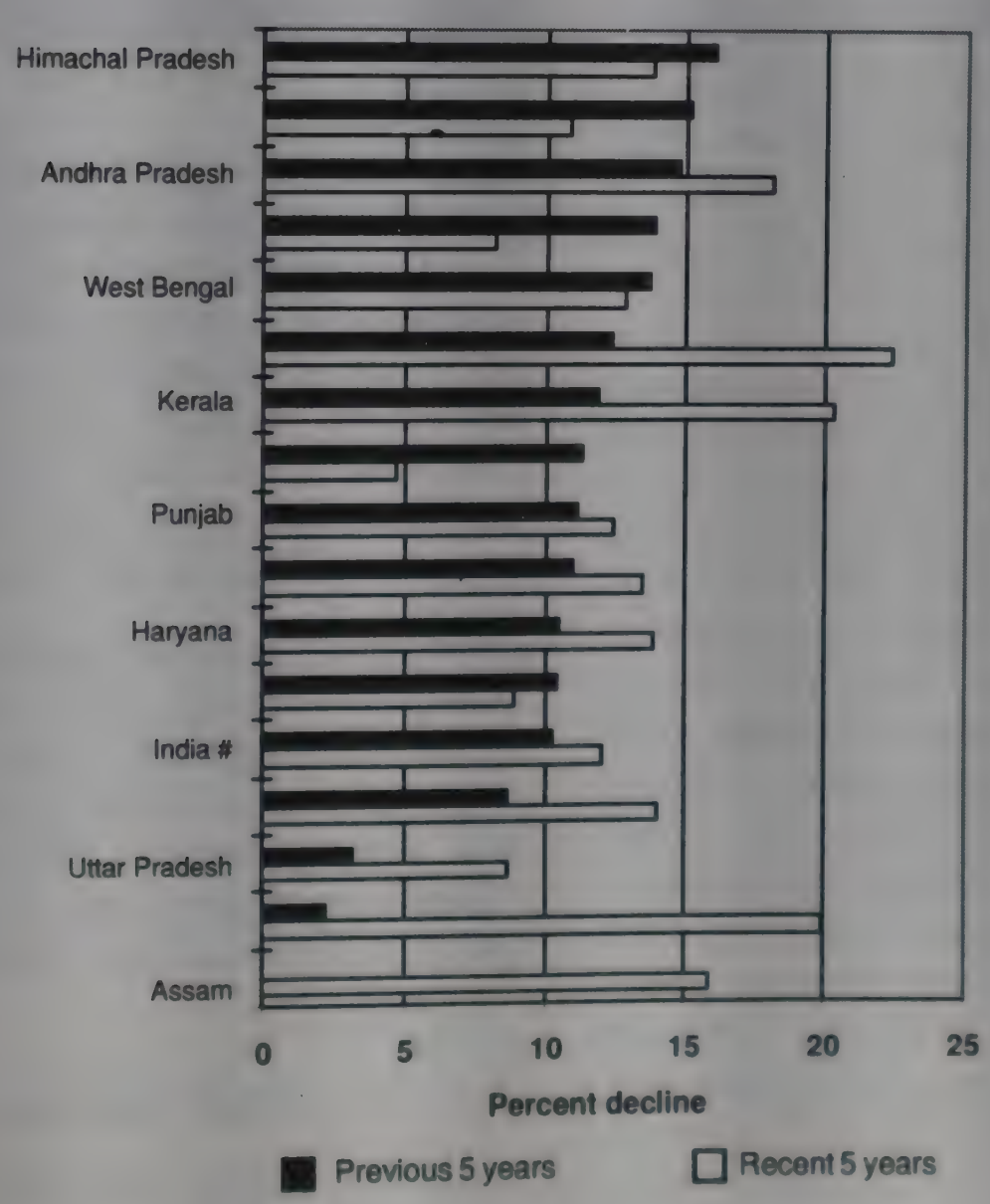
Total Fertility rate is a measure of the "completed family size" i.e. the average number of children women will bear in their life time, if the current fertility trends continue. It is a refined, age-sex adjusted measure of fertility which can be used to compare the fertility performances of different population groups or different areas.

Table 6 shows the TFR for states during 1993-95. Data for two previous five year periods have also been presented for comparability. The TFR during 1993-95 has declined by 10.3% compared to 1988-90. In the previous quinquennium 1983-85 to 1988-90, the decline was 12.0%. Thus the last quinquennium the pace of decline seems to have reduced.

In Kerala and Tamil Nadu TFR is below 2.1 i.e. fertility is below replacement level. Even though Kerala's fertility was at replacement level even during 1988-90, the decline continues. In the states of Himachal Pradesh, Karnataka, Madhya Pradesh and Maharashtra the pace of decline in TFR has accelerated during the quinquennium. In Assam, the TFR has virtually stagnated for the last five years. In the remaining 9 states, though TFR has declined, the pace of decline has slowed down. In Uttar Pradesh, TFR

Chart 6

PERCENT DECLINE IN TFR



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is highest at 5.1, followed by Bihar and Rajasthan at 4.5.

Rural urban break-up of the TFR shows that even in urban areas the rate of decline in TFR has slowed down considerably. While the TFR in rural and urban areas of Kerala and Tamil Nadu are near replacement level, the fertility in urban areas of Himachal Pradesh and West Bengal are also below replacement level. Surprisingly in the urban areas of Maharashtra which contains the major metropolis of Bombay and Pune, the TFR is still above replacement level. While the urban TFR has declined in all states, in Assam and Uttar Pradesh, it has increased during last five years. Punjab is the only state where fertility decline has accelerated during the last quinquennium.

While the rural TFR has declined during the last 5 years, the pace of decline seems to be petering out in most of the states: Karnataka, Madhya Pradesh, Maharashtra and West Bengal are the four states where pace of decline has accelerated.

In short, the TFR figures released by SRS for the recent periods seem to indicate that fertility is declining but at a slower pace.

Teenage Pregnancies

One of the important indicators to measure the reproductive health of the women is the age specific fertility rate in the age group 15-19; (ASFR 15-19) defined as births per 1000 women in this age group 15-19. Pregnancies in this age group are usually termed "Teenage Pregnancies". If this is high, the country most probably has early marriage, high maternal mortality and high infant mortality. In view of its importance this has been accepted by U.N as one of the indicators to monitor reproductive health.

Statewise data on ASFR 15-19 (see Table 3) indicates that it is the lowest in Punjab. Even in Kerala which has a relatively very high age at marriage, the ASFR (15-19) is 27.6. In Madhya Pradesh roughly one among eleven women in this age group give birth to a child. The teenage pregnancies are extra ordinarily high in Andhra Pradesh being 114.3. Surprisingly even in other backward states like Bihar, Rajasthan and Uttar Pradesh, teenage pregnancies are not that high. The traditional practice of 'Gauna' or cohabitating with husband at a date much later than legal marriage may be one of the reasons for the low ASFR in these states compared to Andhra Pradesh.

6. Mortality

"It shall be the policy of the state to provide adequate services to children both before and after birth and through the period of growth, to ensure their full physical, mental and social development. The state shall increase the scope of such services so that within a reasonable time all children in the country enjoy optimum conditions for their balanced growth"

— National Policy for Children 1974

Infant Mortality Rate

The commitment made in the above National policy, which flows directly from the directive principles of Article 39 of the Constitution of India, got further momentum when Govt. of India endorsed all the Child survival goals for the year 2000 agreed by the World Summit for children in 1990. The convention on the Rights of child 1992 of which India was a signatory further enunciated the child's right as right to survival, *right to protection, right to development and the right to participation.*

Of these rights the most important one is the right to survival of the child. Infant mortality and mortality below age 5 are two important measures which help to monitor the progress in this direction. Perinatal mortality rate i.e. number of still births plus deaths during the first week of life, to total number of live and still births, is another useful indicator which directly reflects on the health care of mother at pregnancy and at delivery.

In India the infant death rate is very high being 72 per 1000 live births in 1996. Out of an estimated 8.26 million infant deaths occurring in the world, roughly 1.86 million or 22.5% occurs in India. China whose population is approximately 30% above India's population and has an Infant mortality rate of 37 accounts for less than half of infant deaths in India.

Levels of Infant Mortality Rate

Infant mortality rate varies from a low figure of 14 in Kerala to a high 97 in Madhya Pradesh (Table 7). It is also very high in the states of Orissa, Rajasthan and Uttar Pradesh. Published figures for Bihar indicate that it is almost close to national average. The states of Bihar, Madhya Pradesh, Orissa, Rajasthan and Uttar Pradesh which account for 43.7% of India's population account for 60% of infant deaths. At the other extreme is Kerala with 3.3% of India's population contributing to only 0.4% of infant deaths of India.

Decline in Infant Mortality Rate

Though the levels of infant mortality rate are high, the last decade has witnessed continuous decline in the rate. In the last 5 years the pace of decline has accelerated compared to the previous 5 years, both in rural and urban areas. Such an acceleration is noticed in most of the states. Despite the declining trend noticed, the absolute level of infant mortality rate continues to remain high even in urban areas of India. Since health facilities and personnel are generally believed to be concentrated in urban areas, the persistent urban high infant mortality rate suggests the need for a different approach to reduce infant mortality rate in urban areas. Special programmes of mother and child health for slum populations, such as provision of better ante-natal and post-natal care and hospitalisation facilities at the time of delivery are some possible directions in which we have to move. Adequate nutrition for pregnant woman and children, safe drinking water and sanitation, particularly in slum areas would also need to be emphasised if the infant mortality rate in urban areas are to be reduced.

Perinatal, Neonatal and Post Neonatal Mortality

Because of the very high levels of mortality in the first few hours, days and weeks of life and the differences in the cause of deaths at earlier and later stages of infancy, it is customary to break down the conventional infant mortality rate into rates covering first month or so (neonatal) and the remaining months of the year (post neonatal).

Perinatal mortality

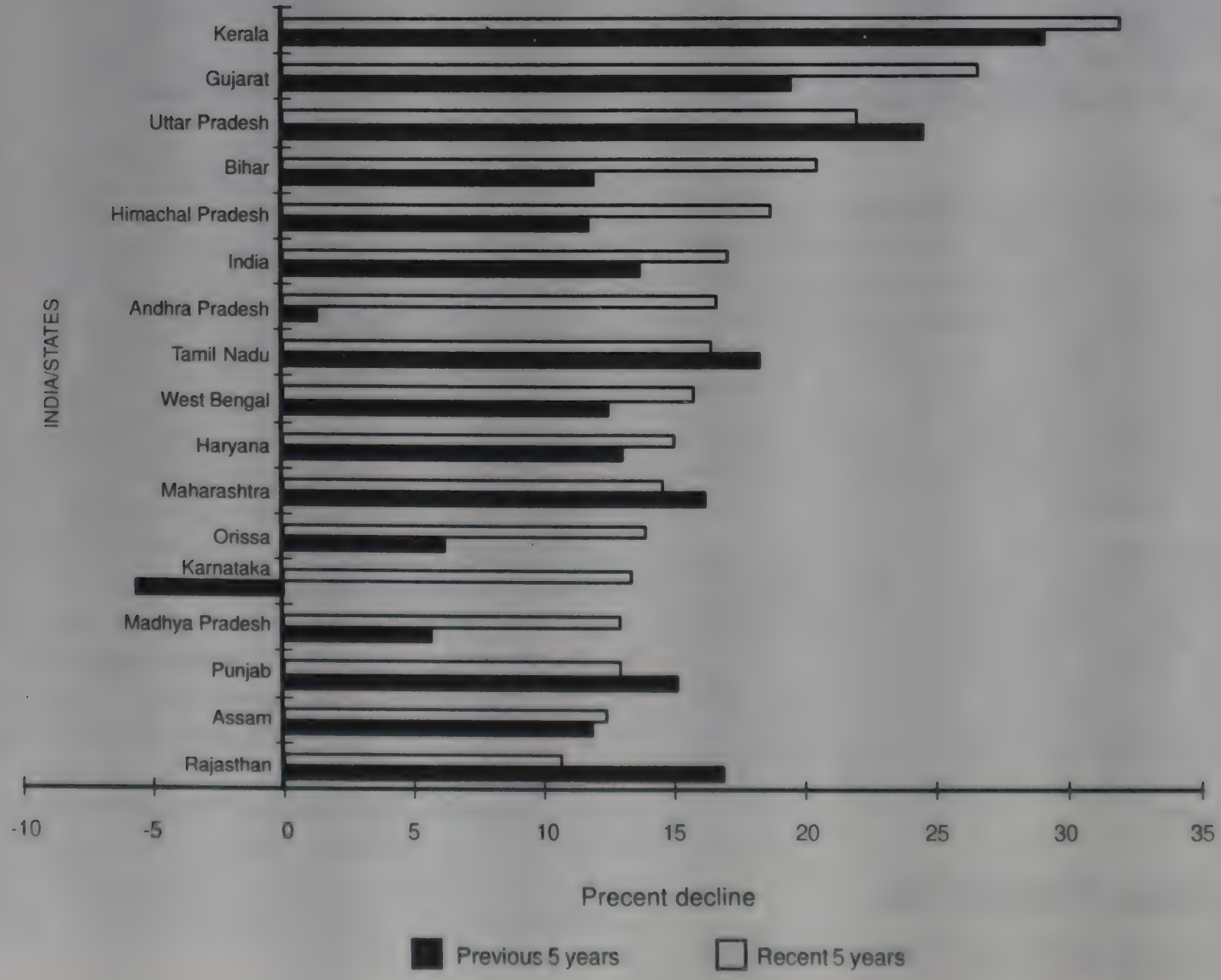
The mortality in the first week of birth is often due to causes different from those causing deaths later in the first month of life. This mortality is much more direct measure of the quality of maternal services such as identifying and monitoring high risk pregnancies, providing such woman special care at the time of delivery.

At the national level perinatal mortality rate is 43.8 per thousand births. It varies from 61.4 in Orissa to 17.7 in Kerala (See Table 8). The fact that Kerala's perinatal mortality is more than Infant mortality rate seems very significant. This is because the still birth rate is still high in Kerala relative to its infant mortality rate. When still births are added to the number of deaths in first week, the resultant perinatal mortality rate seems significant. In future Kerala's infant mortality rate can be brought down only by reducing the still births and this should be the priority for Kerala's MCH programme.

In India over 60% of infant mortality occur in the neonatal period. In states like Karnataka, Kerala and Tamil Nadu three fourths of infant deaths are neonatal deaths. One implication is that universal immunisation programmes which cover children after one month of age can at best reduce infant mortality rate by one third in these states and by

Chart 7

DECLINE IN IMR – RECENT AND PREVIOUS 5 YEARS



40% at national level. To reduce the infant mortality rate further it is essential that quality of ante-natal and post natal services are provided to all pregnant women and mothers. TT immunisation, combating anaemia among mothers, provision for safe delivery and peri-natal care are the important measures by which infant mortality rate can be reduced in future, below a level of 40 at national level.

Under Five Mortality – q(5)

While infant mortality has been traditionally considered as a sensitive indicator of child mortality, in recent years under five mortality i.e. number of deaths below age five per 1000 live births has been increasingly used to monitor the goals of improving child health. The causes underlying the mortality of children under five are different from those of infant mortality. Malnutrition, exposure to infectious and parasite diseases due to unhygienic and insanitary conditions, lack of child care and attention, accidents are some of the important factors contributing to high child mortality. This again is the age group where gender differentials begin to emerge significantly.

The q(5) has declined from an estimated level of 282 per 1000 live births in 1960 to 161 in 1983 and to 113 during 1991-95, centred at 1993. Even today one in nine live births do not live to celebrate their 5th birthday. While only 20 per 1000 live births die before age 5 in Kerala, the mortality rate is more than eight times this value in Madhya Pradesh, Assam, Orissa, Rajasthan and Uttar Pradesh.

Male-Female Differentials

Even though q(5) is very high in Assam and Orissa, the male female differentials are not significant. In Madhya Pradesh, Rajasthan and Uttar Pradesh female children are exposed to significantly higher risk of mortality. In Bihar, Gujarat, Haryana, Punjab and West Bengal also female child mortality is higher than the males. Only in the four southern states of Andhra Pradesh, Karnataka, Kerala, Tamil Nadu and the state of Himachal Pradesh in the north, the female child mortality is lower than male mortality. In Orissa also the differences are insignificant.

Expectation of Life at Birth

The average life span of a child born in India has increased from 32.1 years during the decade 1941-51, centred around 1946 to 57.3 years during 81-91 and to 60.3 years during 1991-95. This increase is largely attributable to various programmes of public health and control of communicable diseases.

Kerala has a life expectancy of 72.9 years followed by Punjab with 67.2 years. Madhya Pradesh with a life expectancy of 54.7 years is at the other end of the spectrum. Himachal Pradesh and Maharashtra are close to 65 years.

The female life expectancy is 60.9 years against 59.7 years for males. During the fifty year period 1930-1980, female life expectancy was behind that of males. This trend has changed during the 80's & 90's. Even now in the states of Bihar, Madhya Pradesh, Orissa, Rajasthan and Uttar Pradesh, female life expectancy is lower than that of males. Of these, except in Orissa, child mortality is higher for females than males. The life expectancy in the urban areas is higher than the rural areas,by about six years at the national level. In the state of Bihar, Madhya Pradesh, Rajasthan and Uttar Pradesh the rural urban differentials are still higher. In Gujarat, Kerala, Maharashtra, Punjab the rural-urban differentials are relatively less, probably due to better spread of health infrastructure and better provisions for road transport and communication.

7. Educational Level

"The state shall endeavour to provide within a period of ten years from the commencement of this Constitution, for free and compulsory education for all children until they complete the age of 14 years."

— Constitution of India (1950) Article 45

While the constitution has directed the state to make all out efforts to achieve the goal in 10 years, the goal is still far away, 48 years after the adoption of the constitution of India. While 18.7 million (13.8 million boys and 4.9 million girls) were enrolled in primary schools in 1951, the number has gone up by six times in 1996 to 110.4 million (62.5 boys and 47.9 million girls). Children in primary school are usually in the age group 6-10. Primary school gross enrolment ratios calculated as the ratio of children enrolled in classes I to V to children aged 6-10, has gone upto 98.6% in case of boys and 81.8% in case of girls. In the middle school (VI to VIII), the corresponding figures are 70.8% and 52.8% respectively. However the primary school enrolment figures are notorious for their inaccuracies. Often these are more than 100 for many states. Not all children who attend the classes I to V are in age group 6-10. In rural areas often children above 10 years are also enrolled in classes I-V. In urban areas children below 6 years are enrolled in schools. Drop out rates are also very high in primary stage. It is for this reason that the enrolment ratio at middle school level (classes VI to VIII) have been used in this report.

Among the major states the middle school enrolment ratio is highest in Tamil Nadu for males and in Kerala for females being 96.6% and 91.7% respectively (Table 9). In Kerala and West Bengal the enrolment ratio for males is over 90%. The enrolment ratio is only 44.2% for males and 24.8% for females in Bihar. In Rajasthan and Uttar Pradesh one in three girls are enrolled in classes VI to VIII, slightly better than Bihar.

Adult Literacy Rate

The adult literacy rate is defined as literacy rate in population aged 15 and above. The rate is very low in India being only 48.2% in 1991. In other words every alternate adult Indian is illiterate. Genderwise the disparities are very high. While 61.6% of adult males were literate, only 33.7% of adult females were literate. By 1995, it is estimated that adult literacy rate would have crossed 50% mark. Thus for the first time in Indian history, there will be more literates than illiterates in the adult population.

As in case of other parameters, wide disparities exist between states in adult literacy rate. Kerala with 92.2% adult literacy rate and Rajasthan with only 38.3% literate are at two extreme ends. Maharashtra with an estimated 64.2% literates in 1995 is way behind Kerala. Surprisingly the small hilly state of Himachal Pradesh is very close to Maharashtra with 63.3% literates.

Number of literates is estimated to have increased from around 251.5 million in 1991 to 293.9 million in 1995, showing an increase of 51.4 million. Simultaneously the number of illiterates has also increased from 270 million in 1991 to 276 million in 1996, 106 million males and 170 million females.This constitutes roughly 1/3rd of world's illiterates.

Wide disparities are noticed between males and females. While at national level, female adult literacy rate of 37.6% is more than half of male adult literacy rate of 64:22%, in Rajasthan the gap is the largest. Only slightly over 18% of females are literate.

At national level adult literacy rate increased by 14.2% during 1971-91, 14.0% in case of males and 14.4% in case of females. Improvements in adult literacy rate are generally slow. Most of this improvement is due to mortality of old age population who were more illiterates, and addition of literates at the lower end of the age group.

In some states like Haryana, Himachal Pradesh, Kerala, Maharashtra, Punjab and West Bengal the improvements were more than the national average. While Kerala is estimated to have the highest female literacy rate of 89.26%, in Bihar and Rajasthan the rates were below 20%, despite 50 years of independence.

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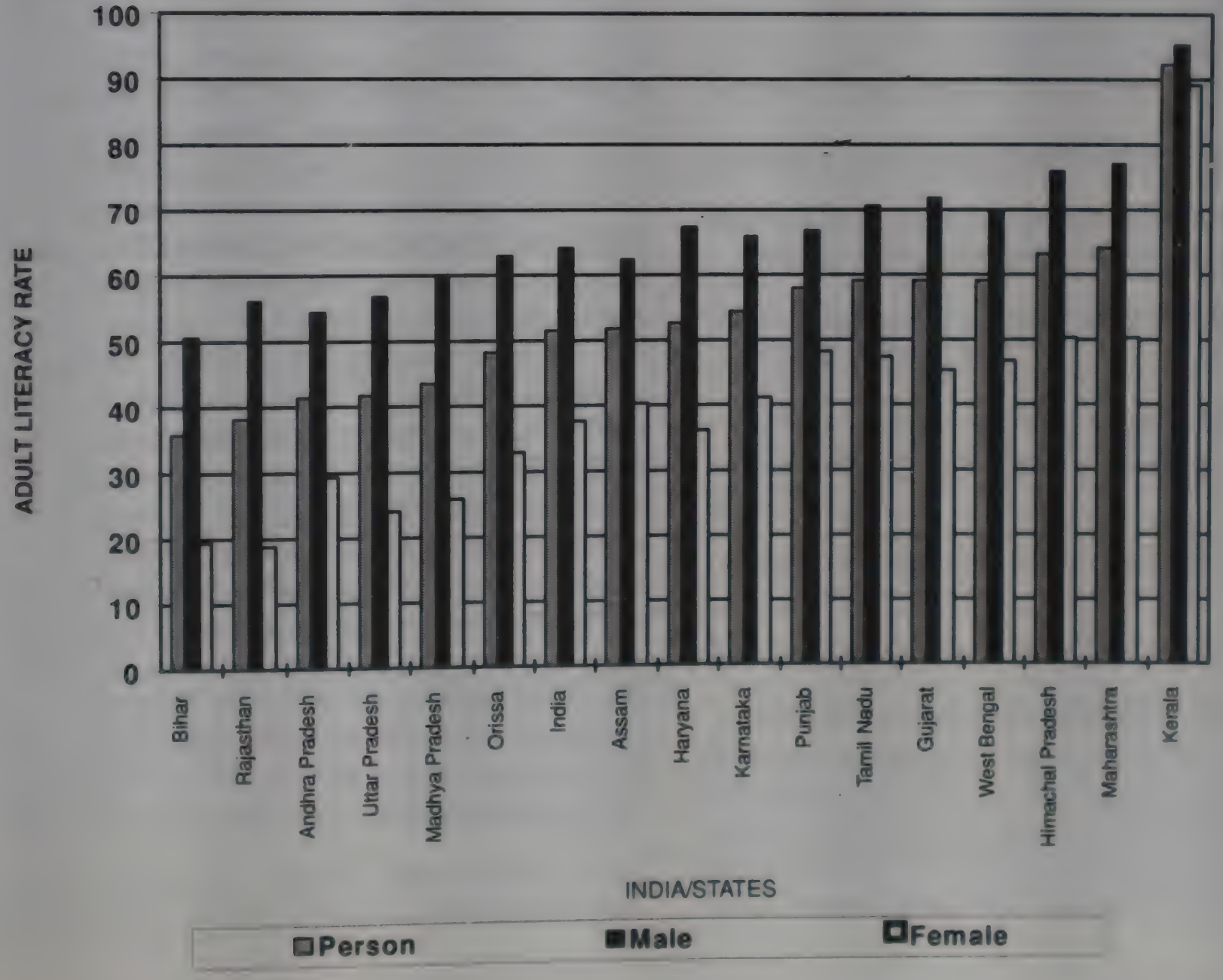
Average Years of Schooling

Even though slightly more than half of the population aged 7 and over are literate in 1991, the average years of schooling remains abysmally poor. The average years of schooling have been calculated using 1991 census data on population classified by educational levels. Census provides

Chart 8

PROJECTED ADULT LITERACY RATES : 1995–
PERSONS, MALES, FEMALES



data on completed years of educational level, those who completed primary, middle, secondary, higher secondary, degree etc. and those who are literate but not completed primary. Those who have completed primary have been assumed to have 5 years of schooling. Similarly those who have completed middle are assumed to have 8 years of schooling. Using these weights, the average years of schooling have been arrived at. These averages have been calculated for males and females, and also separately for literates.

As per 1991 census, Indian males and females had an average schooling of 3.6 years and 2.3 years respectively. The average years of schooling was maximum in Kerala for both males and females. Even in Kerala the average years of schooling was only 5.6 years for males and 5.2 years for females. The average was minimum in Rajasthan, being only 2.8 years for males and 1.3 years for females.

Since schooling applies only to literate population it would be worthwhile to calculate the average excluding illiterates; The average years of schooling for literates is maximum, surprisingly in Bihar being 7.2 years for males and 7.3 years for females. Literate males in Orissa and literate females in Andhra Pradesh. have the lowest years of schooling being 6.0 and 5.7 respectively. In all the states average years of schooling for literates is between 6 to 7 years. Thus it can be truly said that a literate Indian has an average only 6.7 years of schooling.

Note on Computation of Indexes of HDI, GHI an RHI

At the Foundation, we constructed three indexes for assessing the states with regard to their present conditions, based on latest available information on human development, gender related health conditions and reproductive health conditions. These indexes are termed HDI, GHI and RHI; the purpose of each index and the method of construction are briefly explained below:

1. Human Developing Index (HDI)

This index is constructed on lines similar to the one constructed by the UNDP since 1990 for most of the countries of the world and published in the annual series of Human Development Reports, latest being the 1997 Report. It is based on the concept that in any development strategy the 'human development' should be the goal and 'economic development' is the means. Human development is defined as the enhancement of the opportunities of individuals through better health, education and income, Computationally, it is based on a combination of three factors: expectation of life at birth (eoo) of an individual, educational attainment and per-capita income measured in terms of parity-price adjusted per-capita income. The Human Development Index computed by UNDP at the national level for 174 countries in 1997 combines expectation of life at birth, educational attainment, which is a combination of adult literacy rates (15+) and school enrolment ratio at the primary, middle and secondary level, (i.e. upto 10th standard) and per-capita income, which is parity-price adjusted income level from data available around 1993. The weightage to income is reduced for countries with per-capita incomes above certain level, (above US$ 6582, which is the average per-capita income of a country at the global level). Per-capita income above a certain level is not considered to contribute to human development proportionately.

For construction of the HDI index at the Foundation, we have used the expectation of life at birth eoo at the state level for the period 1991-95; educational attainment level which is a combination of adult literacy rate and middle school enrolment ratios (i.e. enrolment ratios between the classes 6 to 8). With regard to per-capita state domestic project, we used the data available for 1995-96, and the income for each state was converted to (PPP$) dollar equivalent taking the Gross National product (GNP) at the All India level as US$ 1400/- as worked by the UNDP. Each component index for life expectancy (I1), educational attainment (I2) and parity-price adjusted state net domestic product (I3) were combined into a single index HDI by giving equal weight to them. The Human Development Index values computed for each of the 16 large states and the country as a whole on the basis of latest available information on life expectancy (1991 to 95), adult literacy rate for 1995, middle school enrolment ratio 1995 and state income (ppp) for 1995-96 are given in Table 1. The details of computation are as follows:

$$\textit{Index of } e_0 \textit{ (I1)} = (e0-25)/(80-25) \times 100$$

$$\textit{Index of Education } (I_2) = (2 \times \textit{Adult Literacy Rate} + \textit{middle school enrolment ratio})/3 \times 100$$

$$\textit{Index of Income } (I_3) = (SDP/GDP \times 1400\text{-}100)\ (6482-100) \times 100$$

Where SDP is the per capita state domestic product and GDP is the net domestic production of India.

$$\textit{Human Development Index (HDI)} = (I_1+I_2+I_3)/3$$

2. Gender-related Health Index (GHI)

This index measures the extent of congruence between males and females on selected indicators. It is computed by the Population Foundation of India on lines similar to the gender related development index (GDI) computed by the UNDP at the country level for 174 countries beginning their

1994 report. This is an index which measures the extent of congruence between the male and female values in terms of expectation of life at birth, adult literacy rates, middle-school enrolment ratios and infant mortality rates. Higher the congruence between the male and female values in these variables, higher will be the score and a lower value on this index indicates a higher level of gender disparity in the state. The index varies from 0 to 100. For each of the three component indexes, an equally distributed index is computed measuring the extent of agreement between the male and female values on this component. Table 2 provides index values of GHI thus computed and its component values. The details of computation are given below:

Index of e^0_0 (males) $I_1(m) = (e^0_0$ males – 22.5)/60 × 100

Index of e^0_0 (females) $I_1(f) = (e^0_0$ females–27.5)/60 × 100

Index of Infant Mortality Rate $I_2(m)$ = (125–Infant mortality rate)/(125–8),
(same for males & females)

Index of Education I_3 (m) = (2 × Adult Literacy Rate + Middle School Enrolment Ratio)/3 × 100

Equally distributed index for life expectancy is the harmonic mean of the indices for males and females. Similarly I2 and I3 have been defined.

Gender Development Index (GHI) = $(I_1+I_2+I_3)/3$

3. Reproductive Health Index

Reproductive Health related Development Index (RHI) has been based on —

(i) Total fertility Rate (TFR);

(ii) Age specific fertility rate for the age group 15–19 (ASFR 15-19);

(iii) Birth order;

(iv) The type of attention at birth;

(v) Perinatal mortality rate;

(vi) Couple protection rate; and

(vii) Educational attainment. These measures have been converted into indices which measure the relative achievements of each state. The construction of these indices is explained in the following paragraphs:

(i) Total Fertility Rate

Total Fertility Rate (TFR) is an overall index of fertility and gives the average number of children that would be born to women, if they continue their reproduction at the current fertility levels. The TFR generally ranges between 6 and 1.6 and the index has been constructed as :

$$I_1 = (6\text{-}TFR)/(6–1.6) \times 100$$

This measures the distance that a particular State has travelled from the initial level of six towards reducing TFR. The longer the distance travelled, the better the performance of state and higher the index.

ii. Age Specific Fertility rate for the age group 15-19 (ASFR 15-19)

Teenage pregnancies are identified as reasons for high maternal mortality rate and high infant mortality rate. Such pregnancies and child births also add to the psychological stress of the women. While the TFR gives an overall index of fertility and consequent risk to mother's health during reproductive period, ASFR 15-19, gives a measure of the risk of child birth that young women are exposed to. ASFR (15-19) in recent period has varied from 120 to 4. These have been taken as upper and lower limits. An index has been constructed as

$$I_2 = [120–ASFR(15–19)]/(120–4) \times 100$$

Lower the ASFR (15-19), higher is the index. Higher this index, the better the performance of the state in maternal mortality and Infant mortality rate.

(iii) Birth Order

One of the objectives of any good family planning programme is to reduce higher order births. The proportion of births of order 4 and above, generally varies between 5 per cent and 40 per cent. Wherever fertility has declined very sharply, the birth order 4+ is in the range of 5 per cent. Wherever the fertility has not declined sharply,

the birth order is in the range of 40. An index of birth order has been constructed as :

$$I_3 = (40\text{–the observed proportion})/(40\text{–}5)$$

(iv) Medical Attention at Birth

Care of the mother during pregnancy and institutional attention at the time of delivery are the corner stones of reproductive health approach. Experts are of the opinion that most of the pregnancy related complications and neonatal deaths can be avoided if births are institutionalised so that mothers can be properly attended to. If institutionalisation is not possible, at least births can be attended to at homes by trained professionals. Data on the type of attention at birth are regularly available from SRS. Percentage of births occurring in institutions and the percentage of births attended by trained professionals have been weighted in the ratio of 3:1 to get a new index, I4.

(v) Perinatal Mortality

The World Health Organisation defines the perinatal period as the period of prenatal existence after viability is reached, the duration of labour and the early part of extra-uterine life. One of the very sensitive indicators of the conditions of the mother during child birth is the perinatal mortality rate. This consists of two components; the still births and the live births dying during first week of life. For computation purposes, the perinatal mortality is considered as all deaths accruing in the first seven days of birth and the number of still births. The still births are generally late foetal deaths of child, particularly of duration of 28 weeks and above. Still births are generally attributed to lack of proper medical check-up of pregnant women, lack of nutrition and lack of ANC. The mortality during the first week of the new born is more likely due to lack of attention at the time of child birth and immediately after the child birth, unhygienic practices during delivery, as also maternal mortality.

The Sample Registration System publishes regularly data on perinatal mortality. In view of its importance of mother care during pregnancy, this has been considered as an index of mother's health. The lower the perinatal mortality, the better the state is. Based on the various country's experience from the sixties onwards, an upper limit of 75 per thousand births (live and still) has been fixed at. Again, based on the experiences, all highly developed countries, such as Canada, USA, Germany, Netherlands and Japan, a lower limit of two has been fixed for perinatal mortality. The distance covered from the higher limit against the total distance to be travelled has been considered as an index of perinatal mortality. For calculation purposes, the following formula has been used:

$$I_5 = (75\text{–}P)/(75\text{–}2) \times 100$$

Where P is the perinatal mortality rate.

(vi) Couple Protection Rate due to sterilisation

This gives the percentage of couples protected by sterilisation. A maximum CPR of 90 and a minimum CPR of 5 have been assumed. The index has been calculated as

$$I_6 = (CPR\text{–}5)/(90\text{–}5) \times 100$$

(vii) Index of Education (I_7)

This has been calculated on the weighted average of middle school enrolment ratio for girls and adult literate rate for female. The weights being 1:2.

Combining the indices

Reproductive Health Index (RHI) has been calculated as simple average of the above 7 indices. This index not only measures the impact of health and family planning service delivery but also the opportunities for education of women. The index varies from 0 to 100.

Birth Interval

Spacing of births is acknowledged to be an important component of mother's reproductive health. Larger the birth interval, the better the mother's health and chances of survival for the child. It is also an index of adoption of spacing methods of family planning. Data on the proportion of births that occur within 12 months, 12 to 24 months, 24 to 36 months and above 36 months of previous birth (well spaced) are available from the Sample Registration System. The larger the birth

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Statement 1 : Percentage of births with birth interval of more than 36 months, 1993 & 1995

		R	U	T
INDIA	1993	29.7	45.1	32.0
	1995	60.0	48.9	58.1
BIHAR	1993	39.7	54.8	40.8
	1995	69.4	52.0	68.1
RAJASTHAN	1993	18.1	39.0	20.3
	1995	67.9	54.2	66.1
UTTAR PRADESH	1993	29.0	43.0	30.7
	1995	68.6	52.7	66.4
WEST BENGAL	1993	32.6	62.1	35.4
	1995	67.3	59.6	66.0

interval, the better can be assumed to be the mother's and child's health. Even in contracepting societies, a large number of births occur within 36 months of previous birth. Based on the experience of contracepting population, an upper limit of 75 percent has been considered as the maximum possible for proportion of well spaced births. The lower limit is taken as zero. An index has been constructed as (BI-0)/75, where BI stands for per cent of women whose birth interval was more than 36 months. Higher this index, the better the impact on mother's health and family planning.

Even though the wall chart prepared earlier by PFI included the index of birth interval, the data released by office of the Registrar General India for the years 1994 and 1995 are at variance with the figures for 1993 which were used in earlier wall chart. In 1993, at national level, 32% of women reported a birth interval of 3 years of more between births. The corresponding figure in 1995 is 58.1% and the increase seems unacceptable particularly for states like Bihar (40.8% in 1993 to 68.1% in 1995), Rajasthan (20.3% to 66.1), Uttar Pradesh (30.7 to 66.4), West Bengal (35.4 to 66.0). At national level the 1993 figures are also close to the figures reported by independent National Family Health Survey (39.4%) for births during preceding five years. A closer look at the published figures for 1994 and 1995 indicates that the lengthening of birth interval has been reported in rural areas much more than urban areas as may be seen from statement below :

Birth intervals can lengthen only if spacing methods of contraception increase sharply. There is no reason to believe such a sharp increase in the adoption of spacing methods between 1993 and 1995, particularly in rural areas of these states. Hence, the 1994 and 1995 data on birth intervals are considered unreliable. The RHI index has therefore excluded this variable from calculations.

TABLES

Table 1 : HUMAN DEVELOPMENT INDEX(HDI)- INDIA & MAJOR STATES 1995

India and States	Expectation of life at birth 1991-95	Index of life expectancy	Middle School Enrolment Ratio, 1995	Projected Adult Literacy Rate (15+) 1995	Index of Education	Per Capita SDP, 1995-96	Index of SDP	Human Development Index (HDI)
1	2	3	4	5	6	7	8	9
	Persons		Persons	Persons				
India	60.3	58.79	62.3	51.5	55.10	9578	20.37	45
Andhra Pradesh	61.8	61.34	45.6	41.4	42.79	8615	18.16	41
Assam	55.7	51.22	71.8	51.9	58.50	6192	12.61	41
Bihar	59.3	57.12	35.5	35.9	35.78	4097	7.82	34
Gujarat	61.0	60.07	67.2	59.0	61.74	11036	23.71	49
Haryana	63.4	64.07	60.7	52.8	55.41	13770	29.97	50
Himachal Pradesh	64.5	65.81	79.3	63.3	68.63	8747	18.47	51
Karnataka	62.5	62.50	61.1	54.4	56.65	9004	19.06	46
Kerala	72.9	79.85	93.9	92.2	92.80	8324	17.50	63
Madhya Pradesh	54.7	49.56	61.8	43.5	49.57	6518	13.36	37
Maharashtra	64.8	66.29	81.6	64.2	70.02	15244	33.35	57
Orissa	56.5	52.52	54.9	48.2	50.42	6079	12.36	38
Punjab	67.2	70.40	62.9	58.0	59.66	15504	33.94	55
Rajasthan	59.1	56.84	56.2	38.3	44.24	6958	14.37	38
Tamil Nadu	63.3	63.88	91.2	59.0	69.73	9868	21.03	52
Uttar Pradesh	56.8	52.98	49.0	41.8	44.17	5983	12.14	36
West Bengal	62.1	61.78	87.1	59.1	68.44	7851	16.41	49

Source:
1. Col. 2 , Life Tables 1991-95, Office of The Registrar General, India
2. Col. 4 , Selected Educational Statistics,1996-97, Department of Education, Ministry of Human Resource Development, Government of India.
3. Col. 5 , Projected by PFI based on 1971, 81, 91 Census data.
4. Col. 7, Economic Survey 1997-98, Ministry Of Finance, Government of India.

Table 2 : GENDER RELATED HEALTH INDEX (GHI): INDIA AND MAJOR STATES 1995

India and States	Expectation of life at birth 1991-95		Index of life expectancy		Equally distri-buted index of e_0	Infant Mortality Rate, 1995		Index of Infant Mortality		Equally distributed index of Infant mortality	Middle School Enroiment Ratio 1995		Projected Adult literacy rate (15+) 1995		Index of education		Equally distri-buted index of education	Gender Health Index
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
	Males	Females	Males	Females		Males	Females	Males	Females		Males	Females	Males	Females	Males	Females		
India	59.7	60.9	57.80	59.79	58.78	73	76	44.44	41.88	43.12	70.8	52.8	64.2	37.6	66.42	42.68	51.97	51
Andhra Pradesh	60.3	62.8	58.87	63.02	60.87	65	69	51.28	47.86	49.51	51.2	39.6	54.3	29.5	53.25	32.87	40.65	50
Assam	55.7	56.1	51.24	51.85	51.54	80	73	38.46	44.44	41.24	82.9	60.1	62.3	40.4	69.14	46.98	55.95	50
Bihar	60.1	58.0	58.46	55.04	56.70	75	71	42.74	46.15	44.38	44.2	24.8	50.5	19.4	48.43	21.22	29.51	44
Gujarat	60.2	62.0	58.72	61.59	60.12	61	63	54.70	52.99	53.83	74.5	58.9	71.6	45.3	72.59	49.85	59.11	58
Haryana	63.0	64.0	63.25	65.02	64.13	63	76	52.99	41.88	46.79	64.7	55.9	67.2	36.1	66.39	42.69	51.97	54
Himachal Pradesh	64.1	64.6	65.12	66.04	65.58	68	56	48.72	58.97	53.36	84.2	74.2	75.9	50.4	78.70	58.36	67.02	62
Karnataka	60.6	63.9	59.38	64.79	61.97	62	61	53.85	54.70	54.27	67.0	54.9	65.9	41.2	66.27	45.78	54.15	57
Kerala	69.9	75.3	74.85	83.85	79.10	15	15	94.02	94.02	94.02	96.1	91.7	95.3	89.3	95.58	90.07	92.75	89
Madhya Pradesh	54.7	54.6	49.45	49.27	49.36	96	102	24.79	19.66	21.93	75.8	45.7	59.6	25.9	65.02	32.52	43.36	38
Maharashtra	63.5	65.8	64.22	68.00	66.05	56	53	58.97	61.54	60.23	86.9	75.7	77.0	50.4	80.32	58.81	67.90	65
Orissa	56.6	56.2	52.62	52.07	52.35	105	101	17.09	20.51	18.65	69.6	39.9	63.1	32.9	65.25	35.26	45.78	39
Punjab	66.1	68.4	68.55	72.25	70.35	49	62	64.96	53.85	58.88	64.8	60.8	66.8	48.2	66.11	52.38	58.45	63
Rajasthan	58.3	59.4	55.44	57.27	56.34	83	91	35.90	29.06	32.12	76.0	33.3	56.1	18.9	62.72	23.69	34.39	41
Tamil Nadu	62.3	64.4	62.10	65.68	63.84	54	54	60.68	60.68	60.68	96.6	85.6	70.4	47.3	79.16	60.07	68.31	64
Uttar Pradesh	57.3	56.0	53.85	51.73	52.77	82	91	36.75	29.06	32.46	62.4	32.6	56.7	24.2	58.58	27.03	36.99	41
West Bengal	61.5	62.8	60.89	62.97	61.91	58	58	57.26	57.26	57.26	90.6	83.4	70.1	46.8	76.92	58.97	66.76	62

Source:
1. Cols. 2 & 3, Life Tables 1991-95, Office of The Registrar General, India
2. Cols.7 & 8, Sample Registration System, Office of The Registrar General, India
3. Cols.12 & 13, Selected Educational Statistics,1996-97, Department of Education, Ministry of Human Resource Development, Government of India.
4. Cols. 14 &15, Projected by PFI based on 1971,81,91 Census data.

Table 3: REPRODUCTIVE HEALTH INDEX (RHI): INDIA AND MAJOR STATES 1995

India and States	Total Fertility Rate 1993-95	Index of TFR	Age Specific Fertility Rate (15-19), 95	Index of teen age pregn-ancies	Couple Protec-tion Rate as on 31.3.96 due to sterilisa-tion	Index of Couple Protec-tion Rate due to steri-lisation	Birth Order (4+) 1995	Index of Medical Atten-tion	Medical Attention at Birth, 1995		Index of Medical Atten-tion	Perinatal Rate 1993-95	Index . of Peri-natal morta-lity	Middle School enrol-ment females 1995	Projec-ted Adult Literacy Rate (15+) females 1995	Index of Edu-cation	Repro ductive Health Index
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
									Inst.	Tr.	Prof.						
India	3.5	56.82	55.2	56.35	30.2	29.65	25.4	41.71	25.2	28.2	25.95	43.8	42.74	52.8	37.6	42.68	42
Andhra Pradesh	2.7	75.00	114.3	4.96	38.8	39.76	12.0	80.00	41.9	27.0	38.18	48.4	36.39	39.6	29.5	32.87	44
Assam	3.5	56.06	52.6	58.61	18.2	15.53	28.9	31.71	20.7	15.3	19.35	44.4	41.96	60.1	40.4	46.98	39
Bihar	4.6	32.58	51.5	59.57	19.7	17.29	35.3	13.43	14.7	18.6	15.68	37.1	51.96	24.8	19.4	21.22	30
Gujarat	3.2	64.39	23.9	83.57	38.6	39.53	18.4	61.71	36.1	36.9	36.30	39.1	49.13	58.9	45.3	49.85	55
Haryana	3.7	52.27	56.5	55.22	33.9	34.00	20.6	55.43	24.2	67.3	34.98	41.4	46.07	55.9	36.1	42.69	46
Himachal Pradesh	2.8	72.73	28.4	79.65	40.7	42.00	12.8	77.71	23.5	25.6	24.03	35.3	54.43	74.2	50.4	58.36	58
Karnataka	2.8	72.73	50.3	60.61	42.8	44.47	17.5	64.29	49.3	25.1	43.25	53.7	29.13	54.9	41.2	45.78	51
Kerala	1.7	96.97	27.6	80.35	41.3	42.71	6.4	96.00	96.8	1.8	73.05	17.7	78.54	91.7	89.3	90.07	80
Madhya Pradesh	4.2	40.91	94.4	22.26	27.5	26.47	26.3	39.14	13.9	21.1	15.70	53.3	29.77	45.7	25.9	32.52	30
Maharashtra	2.9	70.45	55.4	56.17	40.1	41.29	18.5	61.43	47.5	20.1	40.65	38.6	49.82	75.7	50.4	58.81	54
Orissa	3.2	62.88	48.2	62.43	28.6	27.76	23.1	48.29	13.3	22.4	15.58	61.4	18.68	39.9	32.9	35.26	39
Punjab	2.9	69.70	11.7	94.17	38.8	39.76	17.0	65.71	12.4	85.8	30.75	32.0	58.95	60.8	48.2	52.38	59
Rajasthan	4.5	34.85	60.7	51.57	22.3	20.35	27.8	34.86	7.6	25.8	12.15	46.8	38.68	33.3	18.9	23.69	31
Tamil Nadu	2.1	87.88	37.8	71.48	42.3	43.88	8.3	90.57	64.2	20.8	53.35	45.7	40.09	85.6	47.3	60.07	64
Uttar Pradesh	5.1	20.45	42.1	67.74	19.5	17.06	35.9	11.71	7.2	41.6	15.80	45.3	40.68	32.6	24.2	27.03	29
West Bengal	2.9	69.70	66.7	46.35	29.0	28.24	20.0	57.14	35.8	13.4	30.20	40.2	47.67	83.4	46.8	58.97	48

Source:
1. Cols. 2,4,8,10,11&13, Sample Registration System, Office of The Registrar General, India
2. Col.6, Year Book 1995-96, Family Welfare Programme In India, Department of Family Welfare, Ministry of Health and Family Welfare, Government of India.
3. Col.15, Selected Educational Statistics,1996-97, Department of Education, Ministry of Human Resource Development, Government of India.
4. Col.16, Projected by PFI based on 1971, 81, 91 Census data.

Table 4 : POPULATION SIZE IN 1951,1991,1998 AND 2016 AND INDEX OF INCREASE, INDIA AND MAJOR STATES

India and States	Population size in thousands				Index of increase	
	1951	1991	1998*	2016*	1951-98	1998-2016
1	2	3	4	5	6	7
India	361,088	846,303	965,607	1,263,543	267	131
Andhra Pradesh	31,115	66,508	73,773	88,623	237	120
Assam	8,029	22,414	25,531	32,502	318	127
Bihar	38,782	86,374	96,634	132,305	249	137
Gujarat	16,263	41,310	46,869	59,338	288	127
Haryana	5,674	16,464	19,240	25,173	339	131
Himachal Pradesh	2,386	5,171	6,423	7,945	269	124
Karnataka	19,402	44,977	50,758	62,783	262	124
Kerala	13,549	29,099	31,680	36,877	234	116
Madhya Pradesh	26,071	66,181	76,936	105,155	295	137
Maharashtra	32,003	78,937	89,052	107,802	278	121
Orissa	14,646	31,660	35,190	41,023	240	117
Punjab	9,161	20,282	23,005	28,045	251	122
Rajasthan	15,971	44,006	51,691	71,413	324	138
Tamil Nadu	30,119	55,859	60,696	69,866	202	115
Uttar Pradesh	63,220	139,112	162,846	242,861	258	149
West Bengal	26,300	68,078	76,892	96,231	292	125

Source: 1. cols. 2&3, Census of India
2. cols. 4&5, Population Projections for India and States 1996-2016
Office of The Registrar Genral, India

* Projected Population

Table 5 : CHANGE IN CRUDE BIRTH RATE(CBR) , CRUDE DEATH RATE(CDR) AND NATURAL GROWTH RATE(NGR) INDIA AND MAJOR STATES

India and States	Crude Birth Rate			Decrease in Crude Birth Rate		Average annual change(%) in CBR		Crude Death Rate			Decrease in Crude Birth Rate		Natural Growth Rate			Decrease in Natural Growth Rate	
	1983 | 1985	1988 | 1990	1993 | 1995	1988-90 w.r.t 1983-85	1993-95 w.r.t 1988-90	1988-90 w.r.t 1983-85	1993-95 w.r.t 1988-90	1983 | 1985	1988 | 1990	1993 | 1995	1988-90 w.r.t 1983-85	1993-95 w.r.t 1988-90	1983 | 1985	1988 | 1990	1993 | 1995	1988-90 w.r.t 1983-85	1993-95 w.r.t 1988-90
India	33.6	30.8	28.5	2.8	2.3	1.7	1.5	12.1	10.3	9.2	1.8	1.1	21.5	20.5	19.3	1.0	1.2
Andhra Pradesh	30.6	26.5	24.1	4.1	2.4	2.7	1.8	10.5	9.6	8.4	0.9	1.2	20.1	16.9	15.7	3.2	1.2
Assam	34.7	30.6	29.9	4.1	0.7	2.4	0.5	12.8	10.9	9.6	1.9	1.3	21.9	19.7	20.3	2.2	-0.6
Bihar	38.3	34.8	32.2	3.5	2.6	1.8	1.5	14.2	11.7	10.5	2.5	1.2	24.1	23.1	21.7	1.0	1.4
Gujarat	33.5	29.3	27.3	4.2	2.0	2.5	1.4	11.1	9.9	8.1	1.2	1.8	22.4	19.4	19.2	3.0	0.2
Haryana	36.2	33.6	30.5	2.6	3.1	1.4	1.8	9.7	8.9	8.1	0.8	0.8	26.5	24.7	22.4	1.8	2.3
Himachal Pradesh	31.3	29.1	26.0	2.2	3.1	1.4	2.1	10.4	8.9	8.6	1.5	0.3	20.9	20.2	17.4	0.7	2.8
Karnataka	29.7	28.2	24.8	1.5	3.4	1.0	2.4	9.2	8.5	7.9	0.7	0.6	20.5	19.7	16.9	0.8	2.8
Kerala	23.7	20.0	17.6	3.7	2.4	3.1	2.4	6.5	6.1	6.0	0.4	0.1	17.2	13.9	11.6	3.3	2.3
Madhya Pradesh	38.3	36.5	33.2	1.8	3.3	0.9	1.8	14.3	13.3	11.7	1.0	1.6	24.0	23.2	21.5	0.8	1.7
Maharashtra	30.0	28.4	24.9	1.6	3.5	1.1	2.5	9.0	8.1	7.4	0.9	0.7	21.0	20.3	17.5	0.7	2.8
Orissa	32.5	30.8	27.7	1.7	3.1	1.0	2.0	13.6	12.2	11.3	1.4	0.9	18.9	18.6	16.4	0.3	2.2
Punjab	29.7	28.2	25.2	1.5	3.0	1.0	2.1	9.1	8.1	7.6	1.0	0.5	20.6	20.1	17.6	0.5	2.5
Rajasthan	39.8	33.7	33.7	6.1	0.0	3.1	0.0	13.7	11.4	9.0	2.3	2.4	26.1	22.3	24.7	3.8	-2.4
Tamil Nadu	26.9	22.5	19.7	4.4	2.8	3.3	2.5	10.7	8.8	8.1	1.9	0.7	16.2	13.7	11.6	2.5	2.1
Uttar Pradesh	38.2	36.5	35.4	1.7	1.1	0.9	0.6	16.4	12.6	10.9	3.8	1.7	21.8	23.9	24.5	-2.1	-0.6
West Bengal	30.6	28.0	24.8	2.6	3.2	1.7	2.3	10.2	8.5	7.9	1.7	0.6	20.4	19.5	16.9	0.9	2.6

Source: Based on Sample Registration System, Office of The Registrar General, India

Table 6: DECLINE IN TOTAL FERTILITY RATE(TFR) – INDIA AND MAJOR STATES

India and States	TOTAL					RURAL					URBAN				
	Total Fertility Rate (TFR)			Percent decrease in		Tota Fertility Rate (TFR)			Percent decrease in		Total Fertility Rate (TFR)			Percent decrease in	
				1988-90	1993-95				1988-90	1993-95				1988-90	1993-95
	1983 –85	1988 –90	1993 –95	w.r.t. 83-85	w.r.t. 88-90	1983 –85	1988 –90	1993 –95	w.r.t. 83-85	w.r.t. 88-90	1983 –85	1988 –90	1993 –95	w.r.t. 83-85	w.r.t. 88-90
India	4.4	3.9	3.5	12.0	10.3	4.8	4.2	3.8	11.9	8.7	3.4	2.9	2.7	14.7	6.9
Andhra pradesh	3.9	3.2	2.7	18.1	14.7	4.0	3.3	2.8	18.3	14.3	3.3	2.7	2.4	20.0	10.0
Assam	4.2	3.5	3.5	15.9	0.0	4.3	3.6	3.7	15.5	-1.8	2.7	2.2	2.4	16.3	-6.0
Bihar	5.6	5.1	4.6	8.9	10.5	5.7	5.2	4.7	9.3	9.0	4.6	3.9	3.5	15.9	9.5
Gujarat	4.0	3.5	3.2	14.0	8.7	4.3	3.7	3.3	14.7	9.1	3.5	3.1	2.8	11.5	8.7
Haryana	4.8	4.1	3.7	13.9	10.5	5.1	4.4	3.9	13.1	12.0	3.7	3.1	3.0	16.1	3.2
Himachal Pradesh	3.9	3.3	2.8	13.8	16.0	4.0	3.4	2.9	14.3	14.7	2.6	2.3	2.0	11.7	10.3
Karnataka	3.7	3.3	2.8	10.8	15.2	4.0	3.6	3.0	10.1	15.0	3.1	2.7	2.4	13.0	10.0
Kerala	2.5	2.0	1.7	20.3	11.9	2.5	2.0	1.8	21.1	11.7	2.4	1.9	1.8	19.4	8.6
Madhya Pradesh	5.0	4.7	4.2	4.7	11.3	5.5	5.1	4.6	7.3	9.8	4.0	3.3	2.8	17.5	15.2
Maharashtra	3.7	3.4	2.9	8.2	13.9	4.0	3.7	3.2	8.3	12.6	3.2	2.8	2.6	12.6	7.2
Orissa	4.2	3.6	3.2	13.5	11.0	4.3	3.7	3.3	13.2	10.7	3.5	2.8	2.5	21.7	8.4
Punjab	3.8	3.3	2.9	12.4	11.1	3.9	3.5	3.1	11.1	10.6	3.3	3.0	2.5	8.2	15.6
Rajasthan	5.7	4.6	4.5	19.9	2.2	6.0	4.9	4.7	18.9	2.7	4.5	3.6	3.4	20.1	5.6
Tamil Nadu	3.1	2.4	2.1	22.3	12.3	3.4	2.6	2.2	21.8	15.2	2.8	2.1	1.9	22.9	9.4
Uttar Pradesh	5.8	5.3	5.1	8.7	3.2	6.1	5.6	5.3	7.7	4.8	4.5	3.9	4.1	14.7	-6.9
West Bengal	3.9	3.4	2.9	12.8	13.7	4.5	3.9	3.3	13.3	15.4	2.5	2.1	2.0	14.7	6.3

Source: Based on Sample Registration System, Office of The Registrar General, India

Table 7: DECLINE IN INFANT MORTALITY RATE - INDIA AND MAJOR STATES

India and States	TOTAL					RURAL					URBAN				
	Infant Mortality Rate (IMR)			Decrease in IMR		Infant Mortality Rate (IMR)			Decrease in IMR		Infant Mortality Rate (IMR)			Decrease in IMR	
	1983 –85	1988 –90	1993 –95	1988-90 w.r.t. 83-85	1993-95 w.r.t. 88-90	1983 –85	1988 –90	1993 –95	1988-90 w.r.t. 83-85	1993-95 w.r.t. 88-90	1983 –85	1988 –90	1993 –95	1988-90 w.r.t. 83-85	1993-95 w.r.t. 88-90
India	102	88	73	13.7	17.0	108	96	80	11.1	16.7	64	57	48	10.9	15.8
Andhra Pradesh	79	78	65	1.3	16.7	84	83	71	1.2	14.5	59	57	47	3.4	17.5
Assam	101	89	78	11.9	12.4	102	91	80	10.8	12.1	81	56	65	30.9	-16.1
Bihar	100	88	70	12.0	20.5	102	90	72	11.8	20.0	69	60	53	13.0	11.7
Gujarat	103	83	61	19.4	26.5	119	90	68	24.4	24.4	64	62	47	3.1	24.2
Haryana	92	80	68	13.0	15.0	100	85	70	15.0	17.6	62	61	62	1.6	-1.6
Himachal Pradesh	85	75	61	11.8	18.7	87	77	63	11.5	18.2	42	38	39	9.5	-2.6
Karnataka	71	75	65	-5.6	13.3	81	84	74	-3.7	11.9	41	46	45	-12.2	2.2
Kerala	31	22	15	29.0	31.8	32	23	16	28.1	30.4	28	17	12	39.3	29.4
Madhya Pradesh	123	116	101	5.7	12.9	132	124	107	6.1	13.7	77	74	62	3.9	16.2
Maharashtra	74	62	53	16.2	14.5	85	69	66	18.8	4.3	54	46	35	14.8	23.9
Orissa	130	122	105	6.2	13.9	134	126	110	6.0	12.7	80	71	66	11.3	7.0
Punjab	73	62	54	15.1	12.9	80	67	59	16.3	11.9	52	49	38	5.8	22.4
Rajasthan	113	94	84	16.8	10.6	121	100	89	17.4	11.0	76	61	60	19.7	1.6
Tamil Nadu	82	67	56	18.3	16.4	95	78	64	17.9	17.9	55	44	42	20.0	4.5
Uttar Pradesh	151	114	89	24.5	21.9	162	121	93	25.3	23.1	92	74	66	19.6	10.8
West Bengal	80	70	59	12.5	15.7	87	75	63	13.8	16.0	50	45	43	10.0	4.4

Source: Based on Sample Registration System, Office of The Registrar General, India

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Table 8 : INFANT MORTALITY, COMPONENTS OF INFANT MORTALITY AND UNDER 5 MORTALITY, q(5), 1995 INDIA AND MAJOR STATES

India and States	Infant Mortality Rate *	Neo-natal Mortality Rate *	Post neo-natal Mortality Rate *	Peri-natal Mortality Rate *	q(5) **
India	74	48.1	25.9	44.6	113
Andhra Pradesh	67	52.7	14.6	52.2	82
Assam	77	47.3	29.3	49.4	131
Bihar	73	44.4	28.6	38.8	117
Gujarat	62	44.6	17.3	38.5	99
Haryana	69	41.9	27.2	41.7	100
Himachal Pradesh	63	46.0	16.5	39.6	80
Karnataka	62	44.2	17.8	49.7	94
Kerala	15	11.0	4.3	15.7	20
Madhya Pradesh	99	64.9	34.1	55.9	168
Maharashtra	55	39.6	15.0	40.9	75
Orissa	103	62.5	40.6	55.0	145
Punjab	53	28.1	26.0	28.9	76
Rajasthan	86	56.3	30.1	47.1	131
Tamil Nadu	54	40.3	13.9	44.8	66
Uttar Pradesh	86	52.4	33.9	46.2	145
West Bengal	58	38.8	19.3	38.3	91

Source: * Sample Registration System, Office of The Registrar General, India
** Calculated from Life Tables 1991-95, Office of the Registrar General, India

Table 9 : SELECTED EDUCATIONAL STATISTICS, INDIA AND MAJOR STATES

India and States	Enrolment 1995 *						Number of Teachers 1995 *		Average of Schooling In years,1991**			
	Primary			Middle					Average Schooling of males to		Average Schooling of females to	
	Boys	Girls	Total	Boys	Girls	Total	Primary	Middle	Total males	Literate males	Total femals	Literate females
India	46978566	34934582	81913148	26457163	18720234	45177397	1789733	1195845	3.6	6.7	2.3	6.7
Andhra Pradesh	2971914	2664513	5636427	1174966	955432	2130398	106999	50287	3.0	6.6	1.5	5.7
Assam	1677138	1283491	2960629	661794	515156	1176950	81035	48305	3.3	6.7	2.1	6.2
Bihar	4425317	2603478	7028795	2846785	1449738	4296523	121800	100860	3.0	7.2	1.5	7.3
Gujarat	985106	731493	1716599	3265562	2511270	5776832	37006	142641	4.0	6.6	2.8	6.5
Haryana	413849	437194	851043	296823	241409	538232	17813	14015	3.8	6.8	2.3	6.5
Himachal Pradesh	388055	341531	729586	56168	47239	103407	23173	5521	4.1	6.5	2.8	6.1
Karnataka	1316508	1167237	2483745	3247424	2787312	6034736	68169	119794	3.8	6.7	2.7	6.7
Kerala	711667	682584	1394251	770595	707397	1477992	46431	50564	5.6	6.9	5.2	6.8
Madhya Pradesh	5529137	3768565	9297702	2063339	1193132	3256471	214488	97977	2.8	6.0	1.6	6.2
Maharashtra	3074276	2762769	5837045	3579303	3231337	6810640	158074	176998	4.5	7.1	3.2	6.9
Orissa	2313000	1632000	3945000	830000	466000	1296000	111040	38914	3.1	6.0	1.9	6.1
Punjab	958143	877682	1835825	120854	98829	219683	44358	11226	3.9	7.1	3.0	6.9
Rajasthan	3029000	1626000	4655000	2061000	961000	3022000	95293	91643	2.8	6.4	1.3	6.9
Tamil Nadu	2375850	2210885	4586735	1315367	1256523	2571890	115596	64454	4.2	6.6	3.1	6.5
Uttar Pradesh	9983187	6022665	16005852	2744021	1109202	3853223	270459	97331	3.1	6.9	1.6	7.1
West Bengal	5205102	4725719	9930821	683556	616701	1300257	173635	21228	3.7	6.6	2.7	6.5

Source: * Selected Educational Statistics,1996-97, Department of Education, Ministry of Human Resource Development, Government of India
** Calculated by PFI from 1991 census data

Table 10 : PROFILE OF HUMAN DEVELOPMENT - INDIA AND MAJOR STATES , 1991

India and States	No. of households ('000)	Proportion of households having			Proportion of households occupying		
		Electricity	Safe drinking water	Toilet	Pucca	Semi- pucca	Kutcha
India	151033	42.37	62.30	23.70	41.61	30.95	27.44
Andhra Pradesh	13709	46.30	55.08	18.40	38.41	22.58	39.01
Assam	3798	18.74	45.86	37.43	14.62	15.16	70.22
Bihar	14109	12.57	58.76	11.75	30.18	36.00	33.82
Gujarat	7467	65.93	69.78	30.69	56.93	39.01	4.06
Haryana	2646	70.35	74.32	22.45	50.14	35.73	14.13
Himachal Pradesh	987	87.01	77.34	12.39	53.03	40.99	5.99
Karnataka	8018	52.47	71.68	24.13	42.55	40.90	16.55
Kerala	5388	48.43	18.89	51.28	55.97	19.13	24.90
Madhya Pradesh	11774	43.30	53.41	15.07	30.47	64.87	4.66
Maharashtra	14899	69.40	68.49	29.56	52.20	36.14	11.67
Orissa	5983	23.54	39.07	9.81	18.71	22.06	59.23
Punjab	3381	82.31	92.74	33.18	76.97	11.07	11.96
Rajasthan	7375	35.03	58.96	19.57	56.13	22.94	20.93
Tamil Nadu	12343	54.74	67.42	23.13	45.54	18.03	36.44
Uttar Pradesh	22409	21.91	62.24	18.02	41.03	30.34	28.63
West Bengal	12505	32.90	81.98	31.51	32.61	29.38	38.01

Source : Housing and Amenities, Census of India,1991, Office of The Registrar General, India

Table 11: EXPENDITURE (RS.LAKHS) ON HEALTH, FAMILY WELFARE, WATER SUPPLY & SANITATION, NUTRITION AND EDUCATION, 1995-96 INDIA AND MAJOR STATES

India and States	Expenditure on Health and Family Welfare			Water supply & Sanitation,			Nutrition			Expenditure on Education		
	Plan	Non Plan	Total	Plan	Non Plan	Total	Plan	Non Plan	Total	Plan	Non Plan	Total
India	247365	606483	853848	180049	129276	309325	63175	154925	218100	408987	2556062	2965049
Andhra Pradesh	12291	42303	54594	13413	2082	15495	3153	115108	118261	13909	165110	179019
Assam	15301	8192	23493	7262	1841	9103	563	305	868	38595	63250	101845
Bihar	18918	32722	51640	53	9716	9769	1700	N.A	1700	12598	170529	183127
Gujarat	5817	40219	46036	4161	6234	10395	10495	4053	14548	4857	179023	183880
Haryana	6341	10262	16603	596	8971	9567	1106	1094	2200	13652	50396	64048
Himachal Pradesh	5391	7453	12844	2744	4317	7061	425	14	439	9134	25623	34757
Karnataka	19317	33900	53217	19098	1107	20205	3052	2909	5961	37647	135997	173644
Kerala	11560	36193	47753	6537	3659	10196	435	730	1165	9138	156042	165180
Madhya Pradesh	23179	28403	51582	14436	15216	29652	2200	1300	3500	26560	139257	165817
Maharashtra	28103	62075	90178	33076	5732	38808	6150	1580	7730	41336	332227	373563
Orissa	11514	15880	27394	7812	3136	10948	11220	992	12212	24825	80489	105314
Punjab	6885	20303	27188	5661	5313	10974	N.A	N.A	N.A	15114	77259	92373
Rajasthan	18900	32057	50957	211	31239	31450	3822	800	4622	37057	131933	168990
Tamil Nadu	21449	47338	68787	22448	722	23170	14572	24227	38799	17013	211266	228279
Uttar Pradesh	6581	97590	104171	25062	8084	33146	N.A	N.A	N.A	44901	303087	347988
West Bengal	12242	49974	62216	9613	5205	14818	1204	108	1312	15921	195959	211880

Source: Reserve Bank of India Bulletin, 1996-97 - Supplement Febraury
N.A - Not Available

Table12 : PERCENTAGE OF COUPLES CURRENTLY & EFFECTIVELY PROTECTED BY CONTRACEPTIVE METHODS AS ON 31-3 -1996 INDIA AND MAJOR STATES

India and Major States	Eligible Couples ('00)	CCP & CEP due to Sterilisation	CCP due to IUD	CEP due to UID	CCP due to Conventional	CEP due to Conventional	CCP & CEP due to Oral Pills	CCP due to All methods	CEP due to All methods
India	1615932	30.2	8.2	7.8	10.7	5.3	3.2	52.2	46.5
Andhra Pradesh	136409	38.8	4.7	4.5	6.0	3.0	2.0	51.5	48.3
Assam	37277	18.2	1.8	1.7	1.3	0.7	0.6	22.0	21.2
Bihar	177786	19.7	2.6	2.5	1.00.5	0.4	23.7	23.1	
Gujarat	77500	38.6	12.0	11.4	14.6	7.3	2.2	67.4	59.5
Haryana.	30401	33.9	11.3	10.7	16.8	8.4	1.7	63.7	54.7
Himachal Pradesh	9508	40.7	10.7	10.2	8.2	4.1	2.5	62.1	57.4
Karnataka	81525	42.8	7.8	7.4	4.6	2.3	1.8	57.0	54.3
Kerala	46069	41.3	4.1	3.9	5.5	2.8	0.8	51.7	48.8
Madhya Pradesh	134066	27.5	10.9	10.4	14.9	7.4	3.8	57.1	49.1
Maharashtra	152311	40.1	6.5	6.2	8.8	4.4	2.8	58.2	53.5
Orissa	57912	28.6	6.8	6.4	7.5	3.8	1.7	44.7	40.6
Punjab	33218	38.8	31.4	29.9	18.3	9.2	3.4	91.9	81.2
Rajasthan	88231	22.3	4.0	3.8	5.6	2.8	1.9	33.7	30.7
Tamil Nadu	102500	42.3	8.2	7.8	2.6	1.3	2.0	55.2	53.5
Uttar Pradesh	272239	19.5	15.2	14.4	9.3	4.6	2.1	46.1	40.7
West Bengal	124411	29.0	2.4	2.3	3.6	1.8	2.1	37.1	35.2

Source: Year Book 1995-96, Family Welfare Programme In India, department of Family Welfare, Ministry of Health and Family Welfare, Government of India.
CCP - Couples currently protected ; CEP - Couple effectively protected

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H.P. Nagpal
Secretary and Treasurer,
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B-28, Qutab Institutional Area, New Delhi-110 016

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POPULATION FOUNDATION OF INDIA
B-28, Qutab Institutional Area, Tara Crescent, New Delhi–100 016
Phone : 6867080 6867081 6568181. Fax : 91-11-6852766
e-mail : popfound@del2.vsnl.net.in